













# Proceedings Of The Bombay Geographical Society

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# PROCEEDINGS

OF THE

## BOMBAY GEOGRAPHICAL SOCIETY.



### PRELIMINARY NOTICE.

THE Bombay Geographical Society, formerly the Bombay Branch of the Royal Geographical Society of London, was instituted in the year 1831. In conformity with a notice which appeared in the *Bombay Courier* of the 2d April, a Meeting was held in the Rooms of the Bombay Branch of the Royal Asiatic Society, on the 9th April, at which the following gentlemen were present:—

The Right Hon. the Earl of CLARE in the Chair.

Hon. Sir J. W. Awdry, Knight.	W. C. Bruce, Esq.
W. Newnham, Esq.	J. Mill, Esq.
Major General J. S. Barnes.	J. Henderson, Esq.
J. Farish, Esq.	Lieut. Colonel E. Frederick.
Lieut. Colonel Vans Kennedy.	Major T. Powell.
Lieut. Colonel E. Hardy.	Lieut. Sir Keith A. Jackson, Bart.
Lieut. Colonel D. Barr.	Captain G. Brucks, I. N.
D. M'Leod, Esq.	Rev. J. Wilson.
Major J. G. Griffiths.	Rev. J. Laurie.
Rev. T. Carr.	Lieut. A. Urquhart.
Captain E. W. Harris, I. N.	Lieut. W. S. Adams.
H. Roper, Esq.	W. R. Morris, Esq.
Wallace, Esq.	J. L. Philips, Esq.

The Right Hon. the Earl of Clare, Governor of Bombay, having addressed the meeting at length on the objects of the Association about to be organized, a series of resolutions was passed, (on the 9th June 1832,) forming the basis of the future Rules of the Society, which are subjoined as amended and now in force.

1st. This Society, established for the purpose of co-operating with the Royal Geographical Society of London, for encouraging and instituting Geographical researches in Western Asia, and the countries contiguous, is denominated the Bombay Branch of the Royal Geographical Society.

2d. The Society shall consist of Members and Subscribers.

3d. All Members of the Bombay Branch of the Royal Asiatic Society are entitled to be admitted members of the Geographical Society, on making application to this effect through the Secretary, and paying the prescribed annual subscription.

4th. Any person, not a Member of the Bombay Branch of the Royal Asiatic Society, desirous of becoming a Member of the Geographical Society, must intimate the same to the Secretary, upon which he shall be balloted for at a general meeting of the Members.

5th. No applicant shall be considered duly elected, unless he unite in his favour the votes of three-fourths of the Members present.

6th. Subscribers shall enjoy all the privileges of Members, except those of voting at the general meetings, of being elected Office-Bearers, or of becoming Members of the Committee.

7th. An annual subscription, amounting to Rs. 24, shall be paid by all Members and Subscribers in advance, on the 1st of April of each year.

8th. Of the Office-Bearers and Committee.—The Office-Bearers shall consist of a President; a Secretary, and Treasurer, permanent—two Vice-Presidents, and a General Committee of Management (consisting of 25 Members) to be chosen annually.

9th. Two Sub-Committees, consisting of 6 Members each, shall be annually selected from among the Resident Members of the General Committee, at the first meeting after the annual election of the latter. The Sub-Committee having the superintendence of all the internal arrangements, accounts, &c., of the Society, shall be denominated the "Sub-Committee of Accounts;" the other shall conduct the correspondence of the Society, and suggest plans for attaining its scientific objects—to be called "The Sub-Committee of Correspondence."

10th. The Secretary shall be a Member of the Committee of Management, *ex-officio*

11th. Each Sub-Committee can meet independently of the other for the purpose of discharging the business especially entrusted to it, and the meeting shall be summoned by a circular from the Secretary.

12th. The Sub-Committee of Accounts, shall lay before the Annual General Meeting, to be held on the 1st Wednesday of April of each year, the state of the Society's Funds. The Sub-Committee of Correspondence shall lay before the same meeting, a list of the scientific contributions made to the Society during the year.

13th. Each Sub-Committee shall elect, from among its Members, a President to preside at its meetings.

14th. On the functions of the Office-Bearers. — The General Committee of Management shall meet regularly, on the first Wednesday of every month at 12 o'clock; and at these meetings, the Secretary shall request the attendance of all Members of the Society whenever an election of new Members shall require.

15th. The President shall preside at the general meetings of the Society to conduct the proceedings, and give effect to the resolutions.

16th. The Vice-Presidents shall preside at the general meetings in the absence of the President, and in rotation at meetings of the General Committee of Management.

17th. The Secretary shall attend the meetings of the Society and those of the Committee, to record their proceedings and conduct the correspondence. He shall also superintend the persons employed by the Society, and, under the control of the Committee for managing the Accounts, shall superintend the expenditure of the establishment.

18th. The Treasurer will receive, through the Secretary all monies due to the Society, and make payments out of the funds of the Society, according to the directions of the Secretary.

The two following supplementary rules were passed on the 2d of May, 1839, and have since continued in force.

19th. That a class of Honorary Members be instituted, for the purpose of attaching persons of learning and rank to the Geographical Society of Bombay, as customary in other similar institutions.

20th. That the Committee of Management and other Office-Bearers of the Society, eligible annually, be chosen by general vote of the Resident and Non-Resident Members, to whom voting lists shall be forwarded three months previous to the Anniversary Meeting, at which the returns shall be scrutinized and announced.

The following is a list of Office-Bearers originally chosen, and to whose exertions in maturing and training it in its infancy, the Society is mainly indebted for its subsequent success. —



*Patron.*

The Right Honorable the Earl of Clarendon.

*Vice-Patrons*

Hon. Sir J. W. Awdry, Knight.	J. Sutherland, Esq.
W Newnham. Esq.	Major General J. S. Barnes.
J Romer, Esq.	

*President.*

Captain Sir C. Malcolm, Kt., R. N.

*Vice-President.*

Lieut. Colonel E. Hardy.

J. F. Heddle, Esq., *Secretary.*

Messrs. Remington & Co., *Treasurers.*

*Committee of Management.*

The President and Vice-President

Lieut. Colonel Vans Kennedy.	Lieut. Colonel E. Frederick
Lieut. Colonel H. Pottinger.	Major T. Dickinson.
Captain R. Cogan, I. N.	Captain E. W. Harris, I. N.
Major A. Morse.	F. Trash, Esq.
Captain J. Jopp.	Captain G. R. Jervis.
Lieut. M. Houghton, I. N.	Captain J. H. Wilson, I. N.
J. Walker, Esq.	A. Henderson, Esq.
Lieut. F. M'Gillivray.	J. Howison, Esq.
Captain J. Holland.	Lieut. R. Shortrede.
B. Noton, Esq.	Lieut. A. Burnes.

*Members of General Committee of Management.*

E. Ironside, Esq.	J. Morris, Esq.
Captain J. Griffiths.	

*Sub-Committee of Correspondence.*

Major A. Morse.	Captain J. Holland.
Lieut. M. Houghton, I. N.	Lieut. Colonel E. Frederick.
J. Walker, Esq.	J. Morris, Esq.

*Sub-Committee of Accounts*

B. Noton, Esq.	A. Henderson, Esq.
Captain J. Griffiths	

The Bombay Government immediately extended to the Society that liberal patronage which it universally bestows on all institutions of utility connected with the Presidency. The Colaba Observatory was appropriated to its accommodation and the important privilege conferred of allowing the Society's communications to be transmitted throughout the territories of the Presidency free of postage,\*—a privilege subsequently extended to India at large. An application having been made for permission to inspect, or have made over to them, copies of papers supplied to Government on Geographical subjects by officers of the service, the subject was referred to the Court of Directors, without whose sanction the wishes of the Society could not be complied with:—Government strongly recommending the concession desired. A very favorable answer was received to this by return of post; ever since which the Society has been most liberally supplied with every variety of document bearing on the subject of their researches which it was in the power of Government to bestow. At this time also (June 1833) the formation of a Library was commenced, and the whole of the elaborate reports of the Secretary, contained in their records, give much valuable information as to the progress of the Society's labors. A set of meteorological and some surveying instruments for geographical purposes were also purchased and placed under charge of the Secretary, for the use of the members of the Society. In March 1835 a letter was received from London, acceding to the proposal formerly made, that the Bombay Association should be considered a branch of that at home.† The following resolutions explain the relations subsisting betwixt the Parent Society and its Branches:—

Regulations respecting Geographical Societies in the British Colonies or Dependencies, desirous of connecting themselves with the Royal Geographical Society of London.

1. "Geographical Societies established in any of the British Colonies or Dependencies, and expressing a wish to be admitted as Branches of the Royal Geographical Society in London, may be so admitted by the Council.

2. "The Members of all such of these Societies as shall correspond with the Parent Society, and forward to it reports of their Proceedings, shall be considered corresponding members of the Society while out of England; and on their return home shall be eligible, by ballot, with other corresponding members, to be admitted ordinary members without payment of the entrance fee.

\* Minute of 12th June, 1833.

† Minute of 15th March, 1835.

3. "One copy of every volume & part of a volume of the Society's Journal, as successively published, shall be sent to each Branch Society, to be placed in its library; with other copies for the authors of communications which may appear in such volumes; and any additional numbers which may be ordered, shall be delivered in England, at two-thirds of the price to any agents duly authorised to receive and forward them."

The Colaba Observatory having been found inconveniently distant from the fort, the Government in 1835, was pleased to assign the room on the ground-floor of the Court House for the use of the Society; this having afterwards been found unsuitable, the present handsome apartment, under the Council Room in the Town Hall buildings, adjoining the rooms of the Medical Board, was subsequently assigned to them; the Government afterwards, with the approbation of the Court of Directors, granted for defrayment of the expenses of the Society Rs. 100 per mensem. In 1836 it was resolved to commence the publication of the Transactions of the Society in quarterly issues, or as frequently as the amount of accumulated matter in the archives permitted.\* A letter was at this time received from the Royal Geographical Society of Paris, intimating the desire of that institution—the oldest and most distinguished of the kind in Europe—to enter into correspondence, and to exchange papers and transactions, with the Bombay establishment,—a proposal too gratifying to be otherwise than favorably received by the Society: † and the two Associations have accordingly ever since maintained a close and cordial intercourse with each other. The Society, in 1837, reduced the annual subscription from Rs. 24 to Rs. 15, at which last rate it has ever since continued. In July, 1837, the Governor-General, Lord Auckland, with an attention to the interests of science and literature which distinguished his government, in returning thanks for copies of the Society's Transactions which had been forwarded for his use by the President, Sir C. Malcolm, intimated his wish to be admitted a member, and his anxiety to second their exertions in any way within his power: requesting that the President would at all times, and without reserve, point out to him any mode in which he might be able to promote the objects of the Institution.

His Lordship was elected Honorary Patron of the Society; and, in a further communication to the Governor, Sir R. Grant, expressive of the gratification he experienced from his election, he requested again that he should be on all occasions informed in what manner he could

\* Minute of 27th February, 1836.

† Minute of 24th June, 1836.

best assist them, — expressing his anxiety to forward from Bengal such papers on geographical science as might be reckoned competent for publication in the Society's Transactions. In 1841, the Bombay Branch of the Royal Asiatic Society having resolved to establish a Museum, the want of which had been so greatly felt and so often complained of, memorialized the Geographical Society on the inexpediency of attempting to carry on two collections, where a general receptacle, opened for the deposit and exhibition of all the curiosities likely to be collected, would be so much more likely to suit the views of both establishments. By this means, a single centre of resort would be obtained, in place of a variety of little known and comparatively unattractive points, some of which were likely to be missed by the inquirer, and must serve to distract public attention. On these grounds, the Geographical Society was solicited to make over the specimens then in their possession, together with donations which might hereafter be presented to them, to the Asiatic Society's Museum. The request was at once complied with, and the specimens made over accordingly. In March, 1842, an irreparable loss was sustained by the Society by the death of Dr. Heddle, who, from the time of its establishment, had acted as its Secretary. The publication of the Society's Transactions has from this, and other causes, at present fallen considerably behind: but is now about to be brought up by the immediate consecutive issue of four several numbers at present ready for the press.

The following is a list of the papers which have been published by the Society since March 1836, when the papers first began to be printed:—

1. Statistical Account of the town of Bhooj; with a sketch of the inland trade of the Province of Cutch. By Lieut. T. Postans, N. I.
2. Notes on Customs prevalent among the Maldivians, &c. By Mr. W. Christopher, Midshipman, I. N.
3. On the Commerce of Shikarpoor and Upper Scinde. By Captain A. Burnes.
4. A Short Account of the Kattouries or Kattkuries, residing in the Konkan and Attaveesy. By Major A. Mackintosh.
5. Narrative of the late Cruise of the H. C. Brig of War *Tygris*. By Commander Igglesden, I. N.
6. Report on the Inundation that occurred at Surat on the 26th of August, 1837. By Lieut. G. Fulljames.
7. Remarks on the Indian (Tab) river, from its mouth in a town called Foot. By Lieut. F. Whitelock, I. N.

8. Hints for Geographical Information.
9. Report of a Voyage down the Gahra and Indus, from Hareke Puttom to the Sea. By D. Gordon.
10. Some Account of the western portion of Marwar, commonly called Mullani. By F. Forbes, A. M., Assistant Surgeon.
11. Translation of an Account of the Kattus, taken from the mouths of their own Genealogists. Prepared for the Bombay Geographical Society, by James Erskine, Esq. C. S.
12. An Account of the City of Balkh and its neighbourhood, extracted from Persian Authorities. By James Bird, Esq.
13. Vocabularies of seven languages, spoken in the countries west of the Indus. By Lieut. Leach of the Bombay Engineers, with remarks on the origin of the Affghans.
14. Memoir on the river Euphrates, &c. during the late Expedition of the H. C. armed Steamer *Euphrates*. By James W. Winchester, A. M., Assistant Surgeon.
15. Some Notices of the Seychelles, the Almirantes, and the Islands and groups of Islands, situated between the Equator and 12° South latitude, and between 45° and 75° East longitude, &c. &c. By Major William Stirling, 17th Regt. Bombay N. I.
16. Report from Acting Commander Nott, of the I. N., on the Traffic in Slaves, &c. carried on at Massowah.
17. Note on the Island of Karrack, in the Gulph of Persia. By James W. Winchester, A. M.
18. Journal of an Excursion to Sennaar, the Capital of Yemen. By Lieut. C. J. Cruttenden, I. N.
19. Note on Perim Island in the Gulph of Cambay. By Lieut. R. Ethersey, I. N.
20. Illustrations of the Arab and Persian Geographers, or the Geography of the middle ages. By James Bird, Esq.
21. A Visit, in December 1832, to the Cornelian Mines, situated in the Rajpeepla Hills, to the eastward of Broach. By Lieutenant George Fulljames.
22. Report on the Sooloo Pirates. By Commander J. J. Blake, R. N.
23. An Account of the Route between Sonmeanee and Candahar, from the mouth of one of the horse dealers of Affghanistan. Arranged by Captain W. C. Harris, of the Bombay Engineers.
24. Visit to the Hot Spring near Kurrachee. By Lieut. T. G. Carless, I. N.

25. Narrative of a Journey across the Syrian Desert. By Lieut. H. A. Ormsby, I. N.
26. Note on the Hill of Powanghur. By F. S. Arnot, M. D.
27. Note on the Lake of Loonar. By Professor A. B. Orlebar.
28. On the use of common Thermometers to determine heights. By Lieut. Col. W. H. Sykes, F. R. S.
29. Desultory Notes and Observations on various places in Guzerat. By John Vaupell, Esq.
30. Journal of a Visit to Sonmancee, the seaport of Lus, in Beloochistan, during an attempt to reach Kelat from Kurrachee in the disguise of an Usbec, in May 1839. By Captain W. C. Harris, of the Bombay Engineers.
31. Short Topographical and General Description of the Cape of Aden. By Captain R. Foster, Engineers.
32. Some Observations upon Scinde and the river Indus, as far up as Bukkur. By Lieut. R. N. Magrath, H. M. 3d Regt. of Foot.
33. Narrative of a Journey from Zeila and Tadjoura on the Coast of Abyssinia, to Ferri on the frontier of Efat; in April and May 1839.
34. Narrative of an Excursion into the Hazareh Country of Bisut, and the Districts of Bamian and Sighan. By C. Masson, Esq.
35. Report on the landed Tenures of Bombay. By F. Warden, Esq. C. S.
36. Translation of the Copy of the Ancient Record regarding the delivery of the Port and Island of Bombay. Communicated by Major T. B. Jerwis, F. R. S.
37. Population of the Islands of Bombay and Salsette in 1826-27.
38. A Pilgrimage to Hingla. By Captain S. V. W. Hart.
39. Visit to Port Lloyd, Boorin Islands, in Her Majesty's Sloop *Larne*. By Captain Blake, R. N.
40. Commercial and Geographical View of Eastern Africa. By James Bird, Esq.
41. Report on the Munchar Lake, and the Arrul and Narah rivers. Lieut. T. Postans.
42. Observations on the Sindhoo or river Indus. By the late Captain James Macmurdo.
43. Note on some names of Places on the Shores of the Red Sea. By A. Thomson D'Abbadie, Esq.
44. Journal of a march from Ahmedabad in Guzerat, to Sukkur in Upper Scinde. By Captain Del'Hoste.

45. Some Account of the present state of the Trade between the Port of Mandavie in Cutch, and the Eastern Coast of Africa. By Dieut. T. Postans.
46. Extracts from Sir H. Russell's Report on the Nizam's Territories. Communicated by Major T. B. Jervis, F. R. S.
47. Notice on the Ceyla Muria. By the late J. G. Hulton, Esq., Assistant Surgeon.
48. A Topographical Description of the Table Land on the Culler, Mountains. Communicated by Major T. B. Jervis, F. R. S.
49. Meteorological Register kept at Port Arthur, Van Diemen's Land. By D. A. Commissary General Lempriere, &c. &c.
50. Extract from Major Jervis's Statistical and Geographical Memoir of the Western Coast of India,—Section, Revenue and Land Tenures.
51. Treaties made between the Portuguese Viceroy of Goa and the Mahrattas or Peshwa.
52. Tuhnama, or Treaty of adjustment entered into between Ballajee Vishwunath Peshwa, and Seedee Yakoot Khan of Jungeera, on the conclusion of hostilities, A. D. 1732.
53. Authentic Account of the Land Revenue, Sayer or variable Imports; Land and Sea Customs of the North and South Konkan; (9755 square miles) under British Administration by conquest.
54. The Kushelie Grant, dated A. D. 1191, June 20th.
55. Art. II.—Census of the Population of the Northern Konkan.
56. Art. I.—Extracts from the late Colonel Lambton's notices of Malabar. Communicated by Major T. B. Jervis.
57. Art. II.—Descriptive and Geographical Account of the Nilgiri Hills, by Messrs. Fox and Turnbull. Communicated by Major T. B. Jervis.
58. Art. III.—Descriptive and Geographical Account of the Province of Malabar; by Captains B. S. Ward and Connor, Madras Survey Establishment. Communicated by the Right Honorable Sir F. Adam, Governor of Madras, to Major T. B. Jervis.
59. Kavoy Talook.
60. Cheracul Talook of North Malabar.
61. Kotium Talook.
62. Kartanad Talook.
63. Wynaud Talook.
64. Kurambanad Talook.
65. Calicut Talook.

66. Shernaul Talook.
67. Ernaud Talook.
68. Bettananaud Talook.
69. Wullavamaud Talook.
70. Neddunganaud Talook.
71. Paulghaul Talook.
72. Statements shewing the quantity, value and duty of articles imported and exported to and from Calicut and Tellicherry, from May 1828 to April 1829.
73. Art. IV.—Statistical Tables of the Population and Agriculture of the Ceded Districts of Madras. Communicated to Major T. B. Jervis, by the late Principal Collector Mr. Robertson.
74. Art. V.—Statement shewing the works of Irrigation in the Bellary Divisions of the Ceded Districts, the amount of Garden and Wet Cultivation under the same in Fuslee 1235, and the actual sums disbursed for repairs since the Cession, or from Fuslee 1210 to 31st December, 1836.
75. Memoir on the Origin, Progress, and present State of the Survey in India. By Captain T. B. Jervis.
76. Address delivered at the Geographical Section of the British Association, Newcastle-on-Tyne,—Friday, August 26th, 1838, Descriptive of the State, Progress, and Prospect of the various Surveys, and other Scientific Inquiries by the Honorable East India Company throughout Asia; with a prefatory sketch of the principles and requirements of Geography. By Major T. B. Jervis.
77. Narrative of a Journey, from Tak in Daman to Peshawur, through the unfrequented countries of Marwat, Bannu, the valleys of Hangu, and Kohát. By C. Masson, Esq.
78. Narrative of a passage through the Pass of Khyber, communicating between the plain of Peshawur and the valley of Jellalabad. By C. Masson, Esq.
79. Narrative of a Journey from Dakka to Cabool. By C. Masson, Esq.
80. Memorandum on the Siaposh. By C. Masson, Esq.
81. Narrative of ventures in a Journey from Candahar to Shikarpore. By C. Masson, Esq.
82. Lahore viâ Multan, Uch, Kairpur, Hydrabad, and Tatta, to Kurachee and the Ocean. By C. Masson, Esq.
83. Notice on the Countries west of the Indus, from Dera Ghazi Khan to Kala-bag. By C. Masson, Esq.



84. Memorandum on the Countries of Marwa and Bannu. By C. Masson, Esq.
85. Memorandum on Lahore, the Sikhs, their Kingdom and its Dependencies. By C. Masson, Esq.
86. Observations on the Political Condition of the Durani States and Dependencies. By C. Masson, Esq.
87. Account of Karak Island. By M. Leyard.
88. Account of Tadjoura. By C. F. Beck, Esq.
89. Account of Aden. By M. D'Abbadie, Esq.
90. Stirling's (Major) visit to the Falls of Sansadurra.
91. Notice of Granite protruding through the Trap Rock in the bed of the river Nerbudda, at Mundleysir. By Major Stirling.

The following are the Office-bearers for the year 1842-43, as elected at the annual general meeting on the 15th May:—

#### PRESIDENT,

Captain D. Ross, I. N., F.R.S.

#### VICE-PRESIDENTS.

Captain R. Oliver, R.N.  
J. P. Willoughby, Esq.

Colonel T. Dickinson.

#### RESIDENT MEMBERS,

Dr C. Morehead.

Dr. J. Burnes, K.H. L. L. D., F.  
R. S.

Dr R. Brown.

J. G. Malcolmson, Esq., M.D.

Lieut.-Col. N. Campbell.

W. C. Bruce, Esq. (dead.)

Captain E. P. Del'Hoste.

Dr R. H. Kennedy.

Dr J. Glen.

Dr J. McAdam (dead.)

Geo. Giberne, Esq.

Ball Gungadhur Shastree, Esq.

#### • NON-RESIDENT MEMBERS,

Major H. Rawlinson.

Captain W. C. Harris.

Colonel C. Ovens.

Dr J. Bird.

Captain R. Shortrede.

Major J. Holland.

Captain G. L. Jacob.

Lieut. H. A. Ormsby, I. N.,  
F. R. S.

The following list contains the names of the gentlemen elected Honorary Members of the Society from its original institution to the present time:—

1. Captain Washington, R. N., Secretary, to the Geographical Society.
2. Captain Beaufort, R. N., Hydrographer.
3. Monsieur U. Captain Dappy, Hydrographer de France.
4. Colonel Colby, Royal Engineers, Director of the Ordnance Survey.
5. Captain Lawrence, Royal Engineers, Ordnance Map Officer, Ireland.
6. Major Robe, Royal Engineers, Ordnance Map Officer, England.
7. Monsieur le General Pilet, Director of the Journal of France.
8. Colonel Schubert.
9. Professor Henrich Berghams.
10. Professor Bache, Philadelphia.
11. General Campana.
12. Chevalier Balbi.
13. Monsieur E. F. Jomard.
14. Professor Carl Ritter.
15. Monsieur Davizac.
16. Colonel Oberreit, Dresden.
17. Colonel Skribaneck, Vienna.
18. Professor Kupffer, St. Petersburg.
19. Cæsar Moreau, Esq., F. R. S.
20. J. R. Jackson, Esq., Secretary to the Royal Geographical Society.
21. C. C. Jacob, Graberg.

*List of Members of the Geographical Society of Western India from 1832 up to 31st January, 1843.*

1832.		
The Hon'ble Sir J. W. Awdry, Europe,	1841	Major J. Bonamy, Europe. 1839
Capt Scott Adam, withdrawn,	1833	Lieut. Col. Sir A. Burnes, K. C. B., dead. 1842
Geo. Ashburner, Esq. Europe.	1837	The Honorable Sir H. Compton, Europe. 1838
General D. Barr.		Lieut. Col. N. Campbell.
Dr. J. Bird.		The Rt. Revd. Lord Bishop of Bombay, T. Carr.
W. C. Bruce, Esq., dead.	1842	Capt. R. Cogan, I. N., Europe. 1835

H. Collins, Esq., withdrawn 1840  
 Colonel W. Dickinson.  
 Capt. E. P. De Hoste.  
 J. D. De Vitre, Esq.,  
 Europe. . . . . 1839  
 M. De Vitre, Esq., do. 1833  
 The Hon'ble J. Farish,  
 Esq., do. . . . . 1840  
 Col. Frederick, withdrawn 1836  
 Captain T. G. Griffith, 6th Foot,  
 do. . . . .  
 Lieut. Genl. Sir Colin  
 Halkett, Europe. . . . 1833  
 Lieut. Col. E. Hardy,  
 Europe. . . . . 1833  
 Capt. E. W. Harris, I. N.,  
 do. . . . . 1838  
 Dr. J. F. Heddle, dead. 1842  
 J. Henderson, Esq.,  
 Europe. . . . . 1835  
 Major J. Holland.  
 Commander M. Houghton, I.  
 N. Europe. . . . . 1837  
 Dr. J. Howison, do. 1842  
 The Hon'ble E. Ironside,  
 Esq. dead. . . . . 1840  
 V. C. Kemball, Esq.,  
 Europe. . . . . 1835  
 Major Gen. Vans Kennedy.  
 R. L. Leckie, Esq.,  
 Europe. . . . . 1843  
 Rear-Admiral Sir Charles  
 Malcolm. Europe. . . . 1838  
 Dr. J. Murray, withdrawn 1836  
 Dr. D. McLeod, dead. 1840  
 C. McLeod, Esq. do. do.  
 Dr. J. A. Maxwell,  
 Europe. . . . . 1834  
 Capt. F. McGillivray,  
 dead. . . . . 1838  
 J. Morris, Esq., Europe. 1833  
 H. W. Morris, Esq., do. 1838

E. C. Morgan, Esq.,  
 Major, A. S. H. Mountain,  
 Europe.  
 Dr. T. McKenzie,  
 Dr. J. McAdam, dead. 1842  
 John Mill, Esq. Europe. 1833  
 W. Newnham, Esq., do. 1835  
 C. Norris, Esq., dead. 1836  
 B. Noton, Esq., do. 1838  
 Col. Sir H. Pottinger, Bart.  
 Col. T. Powell, dead. 1840  
 The Hon'ble Sir H. Roper,  
 withdrawn. . . . . 1842  
 The Hon'ble James Suther-  
 land Esq., dead, . . . 1840  
 A. N. Shaw, Esq.  
 P. Scott, Esq., Europe. 1842  
 P. Stewart, Esq.  
 Captain R. Shortrede.  
 T. C. Trash, Esq., Europe 1833  
 John Vaupell, Esq., with-  
 drawn. . . . . 1837  
 John Wedderburn, Esq.  
 Europe. . . . . 1837  
 Capt. J. H. Wilson, I. N.  
 do. . . . . 1838  
 R. Wallace, Esq., do. 1834  
 Dr. J. O. Walker, do. 1835  
 Lieut. J. R. Wellsted, I. N.  
 do. . . . . 1836  
 1834.  
 Capt. T. G. Carless, I. N.  
 Europe. . . . . 1841  
 Lieut. T. M. Dickinson,  
 dead. . . . . 1836  
 James Little, Esq.,  
 Europe. . . . . 1840  
 Capt. D. Ross, I. N.  
 John Scott, Esq., M D.  
 J. Sindry, Esq, Europe. 1837  
 R. Smith, withdrawn. 1842

1835.

Lieut. Col. O. Felix.

A. Finlay, Esq., Europe. 1838

Geo. Malcolm, Esq., do. 1837

A. B. Orlebar, Esq., with-  
drawn. 1841

1836.

W. S. Boyd, Esq.

G. L. Elliot, Esq., with-  
drawn. 1842

Dr. S. Fraser, dead. 1840

John Graham, Esq. dead. 1839

W. Henderson, Esq.,

Capt. G. L. Jacob.

Major T. B. Jervis,  
Europe. 1842

Dr. C. Lush, withdrawn 1824

Major A. Mackintosh,  
Europe. 1837

Lieut. Col. P. M. Melvill.

W. R. Morris, Esq.

John Macleod, Esq.

W. R. Murphy, Esq., with-  
drawn. 1842

Lieut. A. Nash.

Lieut. H. A. Ormsby, I. N.,  
F. R. S.

Col. C. Ovens.

W. H. Wathen, Esq  
Europe. 1838

J. P. Willoughby, Esq,

Lieut. John Wood, I. N.,  
Europe. 1840

1837.

C. W. Allen, Esq. with-  
drawn. 1837

Lieut. F. Ayrton, Europe. 1841

Dr. R. Brown.

A. N. A. Campbell, dead. 1838

Dr. C. F. Collier.

J. Erskine, Esq., Europe. 1839

Capt. R. Ethelsey, I. N.

W. Edmond, Esq.,  
Europe. 1840

Capt. G. Fulljames.

Dr. W. B. C. Graham,  
dead. 1839Capt. L. W. Hart, with-  
drawn. 1842T. W. Henderson, Esq.,  
Europe. 1841

Captain R. St. John.

Major R. Leech.

Major J. R. Ouseley.

Lieut. A. G. Shaw, dead. 1840

J. A. Shaw, Esq., Europe. 1843

Major W. Stirling, Europe. 1841

Dr. G. A. Stuart, do. 1839

Capt. C. S. Stuart, Europe. 1840

W. Turner, Esq., dead. 1841

1838.

W. Baxter, Esq.

Dr. J. Burnes, K. H. F. R. S.

J. M. Davies, Esq.

Lieut. E. B. Eastwick.

Peter Ewart, Esq.,  
Europe. 1841Lieut. J. G. Forbes,  
Europe. 1842Col. J. G. Griffiths, with-  
drawn. 1841

Dr. J. Glen.

Geo. Giberne, Esq.

Capt. W. C. Harris.

Lieut. G. Jenkins, I. N.,  
Europe. 1840

Dr. R. H. Kennedy.

Dr. C. Morehead.

Capt. R. Oliver, R. N.

Rev. G. Pigott.  
 Lieut. T. Postmas.  
 R. K. Pringle, Esq.  
 Lieut. G. H. Robertson.  
 John Skinner, Esq.  
 Lieut. G. Wingate, Engineers, Europe. . . . 1841

1839

Lieut. H. Barr.  
 R. W. Crawford, Esq.  
 Dr. D. Clark.  
 Lieut. W. Christopher, N. I.  
 H. G. Gordon, Esq.  
 W. Howard, Esq.  
 Capt. F. Lushington, A. D. C., Europe. . . . 1840

Major G. V. LeMessurier.  
 Lieut. W. Reynolds, withdrawn. . . . 1841  
 Lieut. W. C. Montrion, I. N.  
 Lieut. Col. G. Moore, withdrawn. . . . 1841  
 John Vaupell, Esq.  
 Dr J. W. Winchester.

1840.

J. Bowman, Esq.  
 Geo. Buist, L. L. D.  
 T. Cardwell, Esq., Europe. 1841  
 Lieut. J. C. Cruttenden, I. N.  
 Lieut. W. J. Eastwick, Europe. . . . 1841  
 H. Fawcett, Esq.  
 Rev. W. K. Fletcher.  
 Ball Gungadhur Shastree, Esq.  
 W. H. Harrison, Esq.  
 T. Lancaster, Esq.

Dr. J. G. Malcolmson, F. R. S.  
 W. A. Montrion, Esq.  
 Major H. C. Rawlinson.  
 L. R. Reid, Esq.  
 Capt. W. S. Stuart, Engineers.  
 J. J. Waterston, Esq., N. I., I. N.  
 E. W. Williamsont, Esq., Engineers, dead. . . . 1841

1841.

Manockjee Cursetjee, Esq.  
 Dr. J. McLennan.  
 Lieut. G. B. Munbee.  
 B. A. R. Nicholson, Esq.  
 H. B. Ridde II, Esq. C. S.  
 Dr. B. P. Rooke.

1842.

H. Borradaile, Esq, C. S.  
 Lieut. H. C. Boulderson, I. N.  
 Dr. John Drever.  
 Lieut. W. E. Evans.  
 Lieut. J. S. Grieve, I. N.  
 J. R. Hadow, Esq.  
 Lieut. A. Macdonald, I. N.  
 The Hon'ble Sir E. Perry, Kt.  
 Dr. M. Thompson.

1843.

Comdr. J. P. Saunders, I. N.  
 Lieut. J. Barker, I. N.  
 Comdr. H. B. Lynch, I. N.  
 Lieut. C. P. Rigby.  
 Capt. Geo. D'Arcy.  
 Henry Cormack, Esq.  
 Capt. F. J. Arthur.  
 Lieut. J. S. Aked.

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*Proceedings of a Meeting of the Bombay Branch Royal Geographical Society, held in the Society's Room, on Thursday the 10th March, 1836.*

Agreeably to a resolution passed at the last meeting, the Society met at 3 P. M. instead of 12 o'clock, the former hour being found more convenient for the majority of members.

PRESENT.

Sir C. MALCOLM, *President, in the chair.*

JOHN WEDDERBURN, Esq.

Major CAMPBELL,

A. B. ORLEBAR, Esq.

JAMES LITTLE, Esq.

Colonel DICKINSON,

Lieut. T. M. DICKINSON,

H. W. MORRIS, Esq.

J. F. HEDDLE, Esq. *Secretary.*

Read and approved the minutes of the last meeting.

*The following gentlemen were elected members.*

COLONEL OVANS,

W. H. WATHEN, Esq.

CAPTAIN T. B. JERVIS,

Dr. LUSH,

S. FRASER, Esq.

LIEUT. ORMSBY,

J. GRAHAM, Esq.

Mr. Wedderburn, in giving his vote for Dr. Lush, explained, that at the time the institution of this Society was first proposed, he (Mr. W.) handed to the officiating Secretary a list of gentlemen who were willing to aid in forming the Society. Among these was Dr. Lush, but by some mistake, of the copyist no doubt, instead of Dr. Lush, the name of another gentleman was inserted into the Society's books; and the original list being unaltered, this error had not been corrected.

The meeting desire the Secretary to express their regret that such a mistake should have occurred, and to request Dr. Lush to allow his name to be inserted among the founders of the institution.

Read a letter from the Secretary of the Royal Geographical Society, (received per Steamer,) addressed to the Secretary, as follows:

ROYAL GEOGRAPHICAL SOCIETY.

Regent Street, December 1, 1835

Sir, — I had the honor to receive your letter of the 6th June last, but only the other day, although it came by way of Egypt. No papers either of any kind accompanied it; and it came by post, though indorsed "Honored by Dr. Kemball."

Whenever any papers are received, it will give us great pleasure to publish them soon; and you will observe that the notice regarding the Maldiva Stolls, forwarded in your last, has appeared in our new number. — The same attention will be paid to your next communications whenever they may arrive.

In your present letter, you also express a wish that the copies of the Journal destined for you should be forwarded without delay, but you only promise to communicate the name of the Society's agent in a future letter; till that arrives, then, I am uncertain by what means to convey them to you, but will make inquiry.

I am sorry to say that at present our second volume is entirely out of print, and I shall be unable, consequently, to supply them immediately. A proposal is, however, now before the council, and likely to be entertained, to reprint it.

I have the honor to be,  
Sir, your very obedient servant,  
(Signed) A MACONOCHE.

The Secretary explained, that the papers alluded to in the above letter which were dispatched under the charge of Dr. Kembball, but the letter which was to have accompanied them missed that gentleman, and was sent via the Red Sea. Intelligence of Dr. Kembball's arrival has been received, so that the papers must have reached their destination.

Read Report of the Sub-Committee appointed to provide a room for the Society. (To be printed with the Annual Report.)

Read Correspondence with Government, relative to the donation of Rupees 500, and monthly allowance of Rupees 50, granted by the Right Hon'ble the Governor in Council to this Society. This correspondence will be printed with the Annual Report.

Proposed, and carried, that Mr. Wedderburn be requested to become Vice-Patron of the Society; and that Mr. Wathen, be requested to accept the office of Vice-President.

Proposed, and carried, that each member of the Society shall have the privilege of introducing at the general meetings one visitor, who may be desirous to hear read the papers presented to the Society: such visitors to be introduced at each meeting, after the Society's private business is transacted.

Proposed, and carried, that Reports of the Society be printed from time to time, at the discretion of the Committee. These reports to

\* This has since been communicated.

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contain accounts of proceedings, analyses of papers presented to the Society, the publication, entire, of such papers as may appear to the Committee to be particularly interesting to the community here, and lists of desiderata relative to the Geography of this part of Asia, and the adjacent countries.

**DONATIONS FOR THE LIBRARY.**

*Presented by Government.*

28 Sheets of the Indian Atlas, publishing by order of the Hon'ble Court of Directors.

2 Vols. Folio, Charts.

*Presented by Sir C. Malcolm.*

1 Vol. Folio, D'Anville's Atlas of Ancient Geography.

18 Vols. Porter's Collection of Voyages.

4 Vols. Whiston's Josephus.

*Presented by Captain Ross.*

1 Vol. Col. Beaufoy's Nautical Experiments.

*Presented by Major T. B. Jervis.*

Dalrymple Charts.

*Presented by J. F. Heddle, Esq.*

Annales Des Voyages Par Malte Brun.

Map of the Indus River, &c. compiled in the Surveyor General's Office.

The following papers were then laid before the meeting; and the Secretary was requested to convey to the authors, the best thanks of the Society for their several communications.

*I. Memoir on the Southern Coast of Arabia, by Lieutenant Wellsted I. N. Communicated by the President.*

In this communication, the author describes that portion of the Arabian Coast which extends between the Port of Aden (in latitude 12° 43' N.) and the town of Shaer, (in latitude 14° 39' N., and longitude 49° 29' E.) This space has an extent of about 300 miles, and a direction N. N. E. Its general features present nothing very novel compared to other, better known, parts of the coast, but this paper is valuable, as it fills up a blank in the geography of a part of the Arabian Peninsula, of which no detailed account has yet been laid before the public.



Mr. Wellsted visited this coast on board the H. C. Surveying Vessel *Palæurus*, and was occasionally dispatched by the Commander, Captain Haines, to collect information regarding the geography of the interior of the country, while the other officers were engaged in carrying on the survey of the coast.

On one occasion, the author penetrated to the distance of 70 miles from the coast, to Nukubul Hadjer, where he was rewarded by the discovery of ruins of considerable extent and of several inscriptions, which have been copied and described in a separate paper, communicated to the Royal Asiatic Society.

This paper when copied will be forwarded to the London Branch of the Society, for publication in the Journal of that institution.

## II. *Notes on the Empire of Tombuctoo.* Communicated by a Native Shaik to Doctor Pruner, at Cairo.

For this communication the Society is indebted to Mr. Hyslop, of the H. C. S. of War Clive, who procured the paper from Dr. Pruner, and forwarded it to Sir Charles Malcolm, by whom it was communicated to the Society.

Dr. Pruner is a German medical officer, in the service of the Pacha of Egypt, and, while at Cairo, occasionally met the native, at the house of the Austrian Consul, who communicated the information which forms the subject of this paper. Many of the statements appear rather to be opinions than facts, for the Shaik does not pretend to have seen many of the parts, regarding the geography of which his information would tend to overturn the notions generally received at present. The Shaik states himself to be a native of the State of Tombuctoo, and that he has twice visited Egypt. Once by the route that conducts to Tunis, across the desert, whence he reached Egypt by sea. On the second occasion, he travelled from his country, eastward, until he reached Sennaar, then, passing through Abyssinia, he reached Arabia. This latter journey was performed, the Shaik asserts, *by water*, from Tombuctoo as far as Sennaar.

He states also, that no European traveller has been allowed to approach nearer to the capital of Tombuctoo than seven day's journey. If his assertions are to be credited, "works of the same style of sculpture and architecture as are now remaining in Upper Egypt and Meroe, are to be observed *on the river* between Tombuctoo and Sennaar; and even a few miles outside the capital, there are islands in the river, full of those gigantic works of the old world."

"The inhabitants of Tombuctoo are a black race; their faces are

not like the common negro, but rather approach the conformation of skull which we observe in the Egyptian mummies, and somewhat resemble the Nax tribes still inhabiting the western shores of the Red Sea (Suakin). They are governed by a Sooltan, rather in a patriarchal, than in a tyrannical manner; he does not make, like others, the personal liberty of his subjects an article of commerce, but still you meet, between Arabia and Egypt, a few Tombuctoo slaves in private houses. They lose their liberty during wars, or incursions of the neighbouring negroes. The inhabitants of Tombuctoo live upon the produce of their fields and cattle; and our Shaik pretended that there was not a spot in his country, where man's life was so miserable, as in Egypt; every man has sufficient for his own, and his family's subsistence. Trade is carried on by barter, and the nearest approach to any thing like money is a small shell. Every year a caravan arrives from Tunis, for the exchange of goods, but I could not learn what the articles of the commerce consist of. Neither gold nor precious stones are found at Tombuctoo. The capital is much larger than Cairo.

The correctness of the Shaik's statements requires some corroboration, before this paper can be published.

### *III. Abstract of Reports of the Resources, Population, &c. of Gudjundurgurh. By Captain Holland.*

The territory to which the above Report refers, is situated to the S. E. of Kulludgee, and belongs to a Mahratta Jageerdar, under the protection of the British Government, named Bhojung Rao, one of the Ghorpuray, a family of great influence and antiquity in the Dekhun. This paper is forwarded by Captain Holland with the view of illustrating some observations, which he has communicated in a letter to the Secretary, regarding the great utility and importance of directing attention to statistical inquiries, particularly to the subject of "comparative statistics." Captain H. thinks that the Society would render essential service in promoting researches of this kind, by the publication of such documents as that which he has communicated, furnishing useful data for comparing, not only the statistical relations of different districts with each other, but the changes which these statistical relations undergo, in the same district, in a series of years; thus exhibiting the movements progressive or retrogressive, which may take place in the social condition of these communities in a given time.

Along with the above "Abstract," Captain Holland forwarded

several important suggestions, relative to the future plans of the Society, which were referred to the Committee. Among the suggestions alluded to, Captain Holland refers to the military operations, now (or lately) in progress, against the Bheels and Coles of Guzerat, which may afford excellent opportunities of acquiring information regarding both the people and the wild country which they occupy, if sufficient interest and attention be directed to the subject.

*IV. Journal of a Mission to Scinde, with a Memoir on that Country.* By Lieutenant DelHoste, &c. &c.

Lieutenant DelHoste, as Surveyor, accompanied Colonel Pottinger's mission, which proceeded to Scinde in 1833, for the purpose of concluding a treaty between the British Government and the Ameers, by which the navigation of the Indus was thrown open to commerce. In presenting his papers to the Society, the author has conferred a great obligation, as no detailed narrative of this important mission was before accessible to the public.

The papers are accompanied by a series of sketches illustrative of the occupations, customs, personal appearance, and costumes of the various classes of inhabitants; also drawings of the craft employed in navigating the river, and of the scenery along the banks. A Map also accompanies the Memoir, in which the route of the mission is laid down, and which, besides, contains much information collected by the author from the natives. The state of the river, at the period of Lieutenant DelHoste's visit, is minutely described. He also enumerates and describes the various large branches, which the main stream gives off, below the junction of the Punjab rivers, the nature of the soil, and the natural productions of Scinde. The question of the facilities which the Indus affords for navigation, is also discussed.

A copy of these papers with the illustrative sketches, will be forwarded to the Royal Geographical Society by an early opportunity.

*The following communication is printed entire, to accompany this Report.*

ON SCINDE.

Much has been said upon Sind; and I have perused most of that which has been published, as well as written. I purpose therefore to state, concisely, the result of my reading and observations. I do not record my authorities, and I leave others to find out the points on which I differ from preceding writers. It is, however, due to Mr. Nathan Crow, of the Bombay Civil Service, to state that his "Ac-

count of the country of Scinde" appears, as far as I can judge, to have been the text book of all succeeding writers. It is a finished essay; and, though written so far back as the year 1800, remains to this day a model which, I think, will seldom be surpassed.\* It may then be asked what leads me to write on Scinde? I do so because we have had many, and late, opportunities of increasing our information. In my printed work too, I have rather confined myself to the river Indus than the country through which it flows. It must be borne in mind, however, by all who peruse this paper, that it is one of results.

The country watered by the Indus is called Scinde. This is also the name given to that river itself by the inhabitants. The designation is ancient, since Arrian mentions Scindomana. To speak generally, that country, from the ocean to the confluence of the Punjab rivers with the Indus, bears the name of Scinde. That is from the latitude of about  $23^{\circ}$  to  $29^{\circ}$  N. and from  $67^{\circ}$  to  $71^{\circ}$  E. longitude. The banks of the Indus, however, as high as Sungur, which is in about  $31^{\circ}$  north, are sometimes called Scinde. Without this addition, the area of the country includes about 100,000 square miles. On the south it has for its boundaries the province of Cutch and the Ocean. On the east it has Rajwarra, or the country of the Rajpoots, as also the Daoodpootras. On the north it has the Punjab and Cutch Guudava. On the west lies Beloochistan, from which it is separated by the lofty mountains of Hala.

The great feature of Scinde is the Indus. It traverses the country diagonally in one trunk to the Latitude of  $25^{\circ}$   $30'$ , when it begins to throw off branches. Its Delta, however, commences below Tatta in the latitude of  $24^{\circ}$   $40'$ , after which it enters the sea by eleven mouths, and presents a face of 125 British miles to the ocean. The sources of this great river are hidden. It is certain that it rises in the mountains of Himalaya near Thibet. It is probable that the Shyook from Karakorum and the river of Ladak, from near lake Muusurour, are its principal feeders. From Cashmeer the Indus is separated by a snowy range. It then receives the Abba Seen and passes on to Attok, where it is joined by the Lundye, or river of Cabool. One of the sources of this tributary descends from Pamere, and is nearly as remote as the principal branch. From Attok to the sea, the Indus is familiarly known by the name of "Scinde," or Attok." Mehran is a name only known to foreigners. Attok signifies "forbidden," and it is said to be so called, because the Hindoos are forbidden to cross

\* This paper deserves the notice of the Geographical Society, and it is not too late to publish it.

it. Below the Punjab rivers, it takes the name of "Sira" down to Sehwan, and from thence to the sea that of "Lar." These are two Beloochee words for north and south. The local names for different parts of the Indus are various. Those of the branches in the Delta shall be afterwards enumerated.

The face of Scinde is uninteresting. Eastward of the Indus, there is not a rising ground or a stone in the country, excepting the hillocks of Bukkur and Hyderabad. It is flat and covered with bushes, till it at last joins the desert of sand hills which separates Scinde from India. Westward of the river, as low down as Sehwan, the same flatness prevails to the base of the Beloochee mountains. From that town to the sea, the land is rocky and barren. The Delta of the Indus does not differ from that of other rivers. It is rich, but it is poorly cultivated. Ten miles from the sea, it is frequently an impervious thicket. Higher up, it is overgrown with tamarisk shrubs, which also thread into each other. The rest presents a naked plain of hard, caked clay. Much of the land that is adapted for agriculture, is only used for pasture. Much of it also lies neglected; yet the crop of rice is extensive, and far exceeds the consumption of the country. It is the staple of Scinde; the inhabitants live on it, the merchants export it. It is more abundantly produced towards the sea; higher up, the other grains—wheat, barley, juwaree, &c., are cultivated; also indigo, sugarcane, tobacco, and hemp; both the latter are used as narcotics. There are but few trees in Scinde.

Scinde owes its fertility entirely to the Indus, and more particularly to the annual or periodical swell of the river. The return of the waters is regular—they rise in March, and subside in September. The melting of the snow in the Himalaya, is the cause of this phenomenon. The waters are courted by the inhabitants and distributed by canals far away from the river. The actual swell seldom extends half a mile on either bank. The immediate banks of the Indus are but partially cultivated. The soil is saline and unfavourable to tillage, as is proved by all its spontaneous productions. Without the Indus, the whole of Scinde would become as perfect a desert as the country lying eastward of it. Encrustations of salt and saltpetre are to be seen every where. The latter is exported. Many of the shrubs yield alkalis, which are used in manufactures. With all these natural disadvantages, the revenue of the country in these days sometimes reaches 40 Lacs of Rupees, (£400,000). In the government of the dynasty that preceded the present, it yielded 80 Lacs, (£800,000). The depreciation arises partly from political causes.

The treasure possessed by the rulers is considerable. In the strict sense of the word, Scinde cannot be considered rich; possessing a resemblance to both Egypt and Bengal, it has not the richness of either. The crops, however, are reaped without labor; the seed is scattered after the inundation, and the harvest is certain.

The history of Scinde is clearer than most Asiatic chronology, the marked feature of the Indus running through it, has contributed to preserve it. Herodotus says, that Darius Hystaspes sent an expedition to explore the Indus, which sailed out of the river. Alexander the Great turned this information to account. He found the country inhabited by Hindoos, and ruled by Brahmins. It was made subject to the ephemeral kingdom of Bactria, but regained its independence, which it preserved till the rise of Islam, when, after various struggles, it became Mahomedan. In the first century of the Hijra, or the 7th of the Christian era, the Caliphs overturned the Brahminical dynasty, and ruled by deputies from Bagdad. Duhr bin Chuch was the name of the deposed Raja, and Aloré, near the modern Bukkur, was his capital. Sooltan Mahmood of Ghuzni, conquered it in the 11th century. Altimush, the Ghorian Sooltan of Delhi, made it a fief of his crown, which it continued till the 14th century, when the native Rajas recovered their ascendancy. The successful tribe was the Soomra, which was settled in the confines of Mukran at the Mahomedan invasion. They did not long retain their power, and were displaced by the Suma, another great and ancient native tribe, which yet exists in the country. They took the title of jam. The Raja of Cutch and the Jarejah Rajpoots, are descendants from the Sumas. There are both Hindoo and Mahomedan Sumas. They held it till it was again subdued, after some difficulty, by the Tartar conquerors of Delhi; who, for a time, used the Sumas to govern it. Nadir Shah annexed it to his crown, and it formed a portion of the kingdom of Cabool, raised up by Ahined Shah, one of his generals, to which it is nominally subject at this day. In the time of Nadir the country was granted to the Calorés, a religious family from Beloochistan. In the reign of Timour Shah of Cabool, it was conferred on the Talpoor family, also of Beloochee origin, who now hold it.

The inhabitants of Scinde are much scattered, but the country is not populous. In traditional poesy, it is said to be "*now lakki Scinde*," that is nine lac Sinde. The meaning of this is obscure, but I do not discard it; for the same rhyming statistics assign "*Choud Charee*," (or 14 times 40=560) to Cutch. Though in excess of its number of

\* This, however, has been much overrated, and particularly so by myself.

inhabited places, this is sufficiently near to be understood. Scinde is said to have a lac of peers', or saints' tombs in it. To quit legends, Scinde has a vast number of villages, most of which are moveable. In the desert they are called "*Wand*," near the river "*Raj*" and "*Tan-la*." The temporary villages of Scinde are distinctly mentioned by the Greeks. It is difficult in consequence, to fix the population of Scinde; it is difficult even to fix the number of inhabited places. A village is often changed, and, if stationary, it even changes its name with its owner. This is but a remnant of the pastoral life of the aborigines. No two maps of Scinde can resemble one another. The provinces or subdivisions of it even change names. I find no less than fifty names of these in one author, and he says that their limits run into each other. Even in Alexander's time, we have the names of so many kingdoms on the Indus, that we can only account for them by exaggeration, to enhance the conquests of the Greeks. The whole population may amount to a million. The greater portion of it is moveable. The large places are not numerous. Shikarpore is the first in importance, and has a population of about 25,000, which surpasses that of the modern capital Hyderabad. Tatta, the ancient metropolis, has about 15,000 souls. The only other places of note are Subjul Khyrpoor, Ladhane, Bukkur (with Roree and Sukkur), Sehwan, Hala, and Curachee, which latter is a sea port, and the only accessible to ships in the country.

The inhabitants of Scinde are chiefly Mahomedan. A fourth of the population may be Hindoo. There are no people of other tribes or creeds, if we except a few *Sikhs* of the Punjab, called *Sikh* Lobanee. The Mahomedans are tall and well proportioned, very dark in complexion. All other Mahomedans shave the hair of the head, but the Scindians preserve it, which gives them a look very different from other Asiatics. They also wear caps instead of turbans. Scindee is a term generally used for those who live in temporary villages. They are mostly the original inhabitants converted to Islam, who have intermarried with the conquerors. There are Mahomedans in Scinde, and Hindoos in Cutch, who claim one lineage. The Hindoos do not differ from those in India. They are fairer than the Mahomedans. The Lohanu and Bhatea tribes prevail: they are purely commercial. They are not oppressed more than in other Mahomedan countries. They are often employed in places of confidence. They amass wealth, but they conceal it, and wish to appear poor.

The subjugation of Scinde has been always facilitated by the Indus. India escaped in many places the inroads from the West, but Scinde was one of the earliest conquests of every invader. It is easily ac-

cessible from the Punjab, but it is separated from India by a desert. Scinde has very little resemblance to India on that account. The people have not the effeminacy of the Indian, nor the polish of the Persian. They are less civilized than either; are ignorant and very bigoted. This arises from the nature of their government. It continues from the limited connexion with other countries. The Mahomedan invasion involved a change of creed among the people, and the impression has never been effaced. The dynasty of the Caloras was religious, and the effect of it is apparent every where. It has been well said, that in Scinde "there is no spirit but in celebrating the Eed, no liberality but in feeding lazy Syuds, and no taste but in ornamenting old tombs." The desire to propagate the faith does not now interfere with a certain degree of toleration towards the Hindoos. That tribe is not respected, but it is not degraded. An unclean idolater is a common term of reproach, but has much the same acceptance in Scinde, as heretic has among Protestants and Roman Catholics. Justice is meted out to both, if it cannot be claimed it is not refused. There are no great Hindoo buildings in Scinde, but there are, at the same time, no grand Mahomedan ones, except a mosque and some tombs at Tatta.

The Government of Scinde may be called despotic. Its rulers, the Ameers, are restrained by no laws, though they pretend to abide by the dicta of the Koran in their administration of justice. There are no officers such as Cazees or Moollas, who exercise, independent, their functions, or receive their patronage and encouragement. Syuds and fakeers are, however respected to veneration, the one as being descended from the line of the prophet, the other as following, or pretending to follow, a life of great austerity. Many of the fakeers are, without doubt, virtuous men, but the great bulk are hypocritical fanatics. The universal respect shown to them seems to have corrupted the land. The mendicants in Scinde are more numerous than in any other country in Asia. They can scarcely be called beggars, for they levy tribute in crowds, and, by threats, with great arrogance. Many of the common people take to this profitable vocation, which only requires some show of sanctity. This is exhibited in various ways; one of the most common is to sit all night on the house-top, and repeat the sacred name of "Ullah" (or God) as many thousand times as the tongue can utter it. In Scinde, religion takes the worst possible turn. It does not soften the disposition of the rulers or the asperities of the people; it becomes a trade, and its worthless professors degrade it and themselves. To this there is no counteracting effect in the Government, which besides encouraging these



worthies, is, in itself, politically oppressive." Trade and agriculture languish under it. The people have no stimulus to moral rectitude, and yet they are less degraded than might be looked for. They are passionate, as well as proud. They have much supple flattery, but this does not deceive in Scinde. If trusted, the Scindian is honest; if believed, he is not false; if kindly treated, he is grateful. I repeat, that in oppression the Mahomedan and the Hindoo appear to be pretty equal sharers.

Without political freedom, and with misdirected religious zeal, Scinde cannot boast of the condition of its population. There is no intermediate class between the rulers, their favoured syuds, and the common people. Some Hindoos are rich, but the mass of the people are poor. Their dress, subdued manners and filth, all more than another attest it. They have no education; few of them can read; very few write. In physical form they seem adapted for activity, the reverse is their character. Their faculties appear benumbed. Both sexes, Hindoo and Mahomedan, are addicted to "bang," an intoxicating drug, made from hemp. They also drink a spirit distilled from rice and dates. Debauchery is universal, and the powers of man are often impaired in early life. They do not seek for other than gross and sensual amusements. People only congregate to visit the tombs of worthies or saints, who are deemed capable of repairing the wasted and diseased body, as well as the soul. They have few social qualifications, and even in common life keep up much formal ceremony. There are no healthful exercises among the peasantry, who, as well as the grandees of the land, lead a life of sloth. To be fat is a distinction. A better government would ameliorate the condition of this people; without it the Scindian and his country will continue in the hopeless and cheerless state here represented. I venture to reverse the observation of Montesquieu, and say that the mediocrity of their abilities and fortunes is fatal to their private happiness. The effect is also fatal to the public prosperity. It is unnecessary to state that the sciences are not cultivated in Scinde. The arts, however, exhibit some taste and ingenuity. Leather is better prepared than in any part of India; and their "loongoes," or silk-cotton cloths, are rich and beautiful. The artisan receives no encouragement; the peasant has no reward for his toil.

The language of Scinde is of Hindoo origin. The upper classes speak corrupted Persian, the lower orders a jargon of Scindee and Punjabee. Scindee is a written language.

A despotic government is necessarily upheld by force. The citizen is lost in the soldier. The great portion of the land in Scinde,

is held on the tenure affording military service. External enemies are not to be much dreaded, so that the fetters of the people are forged for themselves. They furnish their rulers with the means to oppress. They never know a citizen's right, and they are as ignorant of their own strength as of their rulers' weakness. Most of the chiefs in Scinde are Beloochees. In their relative position to the people, they, in some degree, resemble the Mamalukes of Egypt. They are not, however, recruited (as was that body) from abroad, though they keep up a connexion with their native country. They are the last invaders of Scinde. The time of their inroad, I cannot fix, but it was probably a succession of inroads. It is now difficult to distinguish a Beloochee from any other Scindian, for they have intermarried with the people. They preserve, however, with care their lineage, and name their tribes with honor. The Scindians complain of the oppression of the Beloochees, but habit has subdued their energies to resist. The military power of Scinde is considerable. For an Asiatic state it is respectable, though without discipline. The force consists of infantry; the arms are a matchlock and sword. The former is of a description peculiar to Scinde. There are few horses, so that there is a want of cavalry. There are guns in Scinde, but their artillery is always ill-served and neglected. On a foreign inroad the country would rise in arms, and the three different Talpocr chiefs would contribute their contingents to meet the enemy. From an European force, I believe they would shrink without resistance; certainly without any persevering opposition. As a soldier, the Scindian is considered brave; at least he is respected by his neighbours, and often hired by them as a mercenary. He does not lose his reputation by being forced to yield to disciplined valour, which is an exotic.

The productions, both vegetable and animal, in Scinde, differ but little from other parts of India. Most of the former have been already mentioned. Many of the European vegetables that are now so common in India, have not been introduced. Apples are however, found even so low as Tatta. The climate of Scinde is variable. In the winter the cold is great: ice is common. In summer the heat is most oppressive, and rain is almost unknown. The dust is intolerable. The clayey nature of the soil admits of all moisture being soon exhaled, and the least wind raises clouds of impalpable powder. The houses require ventilators in the roof, and the windows and doors are made of the smallest dimensions to exclude the dust. Altogether the climate of Scinde is sultry and disagreeable, and very trying to the constitution. The only remarkable tenant of the Indus is the sable

fish (pulla), which enters the river four months during the year. This fish is not found in any other of the rivers of Western India: it is highly flavored. Game of all kinds is abundant in Scinde; but the country is thick, and it is difficult to kill it. The camels and buffaloes of Scinde are superior and very numerous. The horned cattle and sheep are, in general, larger than those of India. Of all these, there are vast herds. They are to be found both near the river, and away from it. All that tract between Scinde and India, and North of the Run of Cutch, is frequented by herdsmen and shepherds, who find water in wells and tanks. They live in "wands," and are erratic in their habits. The tract is much more frequented than its appearance on the map (where it is described as a desert) would suggest. There is pasture between the sand hills and they themselves are not destitute of verdure. The *peloo* (*salvadora persica*), *khureel* (*caparis*), *babool* (*mimosa Arabica*), and *phoke*, are its principal productions, with the thorny milk bush and swallow wort (*asclepias gigantea*). The geological features of Scinde need not detain me. I found fossil shells at Jurk and Luckput. At the latter place some of these weight 12 and 16 lbs English! and were in a perfect state of preservation. They were imbedded in limestone. Westward of the Indus various kinds of marble are found. Limestone indeed appears to be the principal formation. Sandstone also exists. I found a small piece of it about forty miles north of Luckput, imbedded in the soil, which, for the first foot, was mixed with fresh-water shells. There are many mineral springs in the Hala mountains.

It has been already observed that the most striking geographical feature of Scinde is the Indus.

Its length of course, and the body of water discharged by this river, prove it to be one of the largest in the old world. Its tributaries even are rivers of some magnitude. The Hydaspes, Hydraotes and Hesusdrus, are superior to the Rhone. The course of the Hyphasis is forty miles longer than that of the Elbe, and only sixty less than that of the Rhine. Yet the channel of the Indus seldom exceeds the width of half a mile. In the winter it is even narrower. During the season of inundation, the different branches which it throws off are filled. By October they become unnavigable and stagnant. The Indus is a foul river and very muddy, with numerous shoals and sand banks. Though there is generally a depth of 12 feet in the shallowest parts, flat bottomed boats can only navigate it. The reason of this is, that vessels, with a keel, get fixed on the banks, and would be destroyed. The Indus is navigable for about 1200 miles from the sea. Boats may drop down it from within fifty miles of Cabool. Above its junction with the river of Cabool, the Indus is unnavigable.

After the Indus has fairly entered Scinde, it throws off its branches. At Bukkur, which is an insulated fortress of silt on the Indus, below the latitude of  $28^{\circ}$  the superfluous waters of the inundation are sometimes drained off by a channel. In two years out of three it is dry; but when this channel is followed, the water passes the ancient city of Alore (4 miles from Bukkur,) and through the desert near Omercote, to the eastern mouth of Koree. Some authors suppose this to have been once the course of the great river. The reasons are more specious than probable. The first permanent offset of the Indus is the Fulailee, which passes eastward of the capital Hyderabad. It successively takes the name of Goonee, Phurraun, and Koree, and separates Cutch from Sind in the lower part of its course. The next offset takes its departure near Jurk, and is named Pinyaree. It afterwards is called Goongra, and where it enters the sea, Seer. Both these branches, the Fulailee and Pinyaree, have been closed by "bunds" or dams, for the purpose of irrigation. At their estuaries, therefore, they are but creeks of the sea, and have salt, instead of fresh water, if the inundation does not make them fresh by its excess. Some remarkable changes were brought about in the eastern mouth from an earthquake in 1819, by which a large tract of land was, and still continues, submerged.

About five miles below Tatta, the Indus forms its Delta by dividing into two branches. These bear the names of Baggaur and Sata. The first runs off at right angles westward; the other flows southward. The Baggaur passes Peer Putta, Darajee, and Lahory Bunders, and enters the sea by two subdivisions, the Pittee and Peeteenee. The Sata subdivides into seven streams, and reaches the sea by the mouths of Jooa, Reethel, Hujamaree, Khedywaree Gora, and Mull. There are even other subdivisions, but it would only confuse to name them. All these mouths have communication with each other, so that the internal navigation of Delta is extensive. The course of the waters of the Indus is most capricious and inconstant. One year the Baggaur is dry, and in another the Sata shares a like fate. In 1809 the principal portion of the waters were disemlogued by the Baggaur.—In 1831 their channel of egress was confined to the Sata. The seven mouths of the Sata even vary in their supply of water, but one branch of the Indus is always accessible to country boats. The great mouth at present is the Gora, but, from sand-backs, it is not accessible to ships. Those mouths which discharge least water are most accessible.

(Signed) ALEX. BURNES.

Cutch, January, 1836.

## MEMOIRS. ANALYSES. ANNUAL REPORT FOR 1835-36.

I.—*An Account of Arabs who inhabit the Coast between Ras-el-Kheimah and Abothubee in the Gulf of Persia, generally called the Pirate Coast.* By Lieut. H. H. Whitelock, I. N.

THE number of inhabitants properly said to belong to this shore, cannot be ascertained with much certainty, as they are mostly seafaring people, and at some seasons of the year, particularly during the pearl fishery, the towns are nearly deserted by the men, who leave their wives and children at home under the care of those who have passed the period for active employment in such arduous work.

Any calculation deduced from the number of houses and supposed occupants, would be very fallacious in a country where the inhabitants live principally in cadjan huts, which are erected without much trouble or expense, and are frequently deserted: we have therefore to rely upon their own accounts, and as the Shaiks are generally actuated by directly opposite views in giving information regarding the power and influence of each other, perhaps the mean difference of such statements may be taken as an approximation to the truth, and as such, they may be computed at 11 or 12,000, belonging chiefly to the various tribes of Joasmee, Menasseer, Beni-Yas, and Mahama.

The character of the inhabitants on this Coast is in most points, what might be expected to be the result of their mode of life and occupation. Their only business in peace is on the water as fishermen, and divers for pearl. But as each town is generally at war with the neighbouring one, they are familiar enough with strife and plunder, so that, when employed, it is in the most active manner, and they have to encounter great hardship in obtaining their livelihood. These occupations, however, cannot be pursued during many months of the year, as the temperature of the water is too cold for them to dive for pearls, except in June, July, August, and September; and in the winter months the violence of the sea on this open shore puts a stop to the fishery, except in the creeks or immediate vicinity of their homes; having no agricultural labors to take to at this time, they are reduced to a total state of idleness, which, no doubt, leads to their predatory acts upon each other.

Being familiar with arms from youth, and hardy of constitution, naturally accustomed to privations, fatigue, and danger, it is to be expected that they should be brave, and they are found to be so.

Amongst themselves the character of the lower orders appears to advantage; quarrels are seldom heard of; old age is always respected, and filial duty performed; hospitality is proverbial: in manner they are stern, and any thing trivial, or in the way of joke or humor, is either not understood or despised; firmness of body and mind are the qualities that alone carry respect with them, and are the necessary qualifications for their rulers.

The Shaiks on this Coast are despotic, and always retain a strong body-guard for protection, and to keep their subjects in order and obedience; this is effected usually without frequent recourse to violent punishments, as far as I could learn, as they do not exact much from the people beyond military service in war time.

The old men are usually consulted in matters of importance, and to settle disputes and quarrels, and this apparently satisfies them all.

Tanoun, the Chief of Abothubee, at the time I am writing of, was an active character and fond of enterprize, he carried this in his appearance and seemed to delight in warlike exercise.

I remember his paying Captain Guy a visit of ceremony, accompanied by twenty or thirty soldiers, fully equipped for war and mounted on tall camels, which were remarkably well covered with hair, and of a bright brown color, and certainly the finest I ever saw. In approaching they made a charge at full speed in regular order, and pulled up suddenly within three hundred yards of us, when down the camels dropped on their knees at the word of command. Tanoun approached a little in advance in the centre of his men, who formed in half circle behind him. Captain Guy rose, and walked forward to meet him. Refreshments, coffee, and sweetmeats, had been prepared in the tent, with the necessary carpets for sitting down upon before hand, and the visit went off in the usual way. In the evening Captain Guy returned it, and we saw the soldeirs shoot at a target with matchlocks.

I cannot extol their practice, for our sepoys of the Marine Battalion equalled them fully with their muskets; and the Doctor and some of the officers rather astonished them, by taking so much better aim with their rifles and fowling-pieces.

Tanoun was rather a small man, but well made; he was reputed to be both brave and liberal, and appeared to be feared by the people. He was at the head of the Beni-Yas tribe, and could command the services of about 400 well appointed soldiers: this gave him rather the ascendancy by land over the Shaik of Sharjah, and the other chiefs on this Coast; and his aid was considered to be of such importance to the Imaum of Muscat, when he made an attack on the Island of

Bahrein in 1828, that he endeavoured to secure it by purchase, and, as far as outward appearances went, he gained his point. However, during the attack Tanoun's men deserted the Sultan's cause in so shameless a manner, that it was generally believed that these mercenaries were in the pay of both parties.

Sultan Bin Suggur, the Chieftain of Sharjah and Ras-el Kheimah, (belonging to the Joasmee tribe,) has the advantage over the Shaikh of Abothubee in the number of his boats. They are generally at war with each other. He differs from the usual character of these men, which is generally bold and frank; and is thought to be a cool, deceitful person, and no faith can be placed in his engagements with any party; but they admit his abilities for stratagem in their mode of warfare. He would have been, no doubt, a troublesome character, had his power not been taken from him during the expedition in 1819 and 1820, which laid Ras-el Kheimah, then a most formidable town for this country, in total ruin, and destroyed most of the forts at the other towns.

Previous to this event it was supposed that Ras-el Kheimah, and its dependencies in the Gulf, could fit out nearly 100 boats; many of them were from 3 to 400 tons burthen, and with this force they perfectly infested the seas, and committed the most daring piracies on the trading vessels, and on some occasions attacked our vessels of war.

If it be remembered, that the entrance of the Gulf between Larack and the Quoins is only 36 miles broad, it will at once be seen how easily they could plunder the vessels proceeding either up or down the Gulf; and to render this even more easy, it so happened that we were totally ignorant of the deep inlets about Ras Masandam, which afforded them such excellent points to rally from, or retreat to, when chased.

After the destruction of Ras-el Kheimah, and the capture of their best boats, they were reduced to order, and, with little exception, have remained so for the last 16 years: indeed, beyond their own quarrels, we have seldom heard of any acts of plunder on the sea.

Their connection with the opposite ports\* on the Persian Coast, many of which had been conquered by them, is nearly broken off, and the number of inhabitants on the Coast is much reduced. If they are kept in this state, and not allowed to make head again

\* Lingar, a town of considerable trade, situated between Cape Bostana and Basidoh, being governed by a relation of Sultan Bin Suggur, and populated chiefly by the Joasmee tribe, may be still considered in alliance with Ras-el Kheimah and Sharjah.

which they both hope and expect to do, I do not think the Gulf will be ever again in a state of general disorder: if it is, we shall have ourselves to blame, as nothing is to be apprehended from any other part of the Gulf, except perhaps, from Bahrein, which has more resources within itself, and the power of being more troublesome to us, than the whole of the other ports put together. But, as I shall have to speak of it hereafter very fully, I shall not mix it up with this account.

If I am right in supposing that if the Gulf is again ever seriously disturbed by piracy it will be from this Coast, I believe that every body properly acquainted with the subject will admit, that Basidoh is the best port that could be selected for a naval power to be stationed with a view to suppress it: it is so immediately in the vicinity of the piratical ports, and that part of the sea in which they would commit their depredations. It has secure anchorage and other advantages as a naval depot, superior to any other place that I know of in that vicinity: it may be objected to as unhealthy, but it is less so than any other place that has been tried.

When the troops were stationed at Kishem, Daristan, and Salkh, situations all differing in aspect, they were found equally unhealthy, or rather more so than at Basidoh.

If the presence of a naval force is required in the Gulf, it is more particularly so in the lower part of it; and the inconvenience of the distance, and the time it takes to communicate with the authority at Bushire, will be seriously felt in times of trouble: and of this the Arabs are well aware, and can reckon with accuracy how long it will be before any cognizance can be taken of their misdeeds, in consequence of the necessity of a previous report being made to the political authority.

From the intricacy of the navigation between Abothubee and Sir Beni-Yas, the surveying duties were principally performed by detached parties from the vessel; and I formed one of the number that quitted the Psyche in February 1824, with the ship's boats fully equipped with every thing for six weeks' consumption. The Shaik of Abothubee (Tanoun) had readily supplied two good native vessels, pilots, and a strong guard of Arabs for us, under charge of his nephew, who was then a conceited young man about 20 years of age, very vain of his management of a war-camel, and his prowess in throwing a spear; and I think he was much disliked by the people for his pride.

They joined our sports as readily as we did their's, and wrestling, leaping, and single stick, often formed the diversion of the afternoon;



and on these occasions our proud conductor frequently met a fall, and his extreme discomfort was much increased by the loud laughter of the Arabs. In the evening we joined their sports and in a circle round a large log-fire, played at simple games of chance, and sipped coffee.

I much regret I did not know the language well, as I believe we had one or two capital story-tellers amongst them, amusing fellows I can attest, from the attention and laughter they could cause when they pleased.

Our first encampment was on an island, where we procured a donkey and seven camels, which we found very useful, as walking in the heat of the day in the soft sand had laid us up pretty generally with sore feet; and I was much afraid we should have to part with them when we left the island, as I knew it would be impossible to boat the large brutes in any thing we had, and the narrowest part to cross was four fathoms deep and one and half mile broad. In reply to my inquiries the Arabs laughed, and said I should see how they would manage it, which they did in the following manner. They chose a tractable camel for a leader, and made them one after the other fast in a string, with about three yards of line intervening; they pushed the first into the water, hoisted their large sail in the boat, and by dint of blows he was soon fairly afloat, then another, and in this way the whole line were towed at the rate of two miles an hour across the creek: the donkey would have been served in the same way, but we had boated him in the mean time ourselves. I never happened to see this done either before or since.

The Arabs on this Coast, when arrived at full vigor, are strong, muscular, thick set men, and combining their efforts when working together in an unusual degree. I have often seen them launch and haul up their boats with apparent ease under difficult circumstances, and, perhaps, from a mixed feeling arising from a desire of shewing themselves to advantage and to oblige, they frequently volunteered their service on like occasions to assist us. In early youth they are lathy, slender looking men, active withal, but considerably under our standard in stature; from thirty to forty they are a powerful thick-necked race, with a developement of sinew and muscle that I never saw surpassed. But in old age, generally much attenuated; it is seldom that you meet with a sleek, corpulent person amongst them at any age.

They wear the Wahabee dress generally, and appear proud of it; I dressed up once or twice to please them, and they appeared heartily amused. The head dress, which is composed of rich silk and cot-

ton thickly woven, is striped red or green and bright yellow, about four feet long and three broad, with the end of the material twisted into a fringe of long cords on the side; they wear it hanging over in front very much, and it gives a scowl to their harsh rugged features which suits with their character; a pouch for tobacco or cartridges of some rough skin, and a horn for powder worn over the shoulder and suspended by silken strings; a matchlock generally ornamented with silver about the stock; a spear about seven feet long, and always a rich dagger in the girdle, form part of their usual costume, to which I should add a long double-edged strait sword, having a long handle without any guard for the hand, the sheath of leather usually ornamented with silver. The body dress is generally a long white shirt open in front and buttoned at the throat, and sandals made of camels hide very well tanned.

The camoleen, or outward garment, is made of woollen twist, either thick and close wove, or exceedingly fine and open; the thick kinds are mostly black, and sometimes ornamented with gold thread, when worn by the better orders. The poorer classes use a striped camoleen white and brown; they vary in cost from two to thirty dollars. They bind a cloth round the loins, which is generally chequered brown and white; it is sometimes made entirely of silk, but more frequently of a mixture of silk and cotton. The men shave their heads, and do not usually allow the beard or mustaches to grow very long.

The women wear blue shirts or very loose gowns, handkerchiefs on their heads, and always dark masques over their faces, with peep-holes to see through. A few of them are pretty, and they are much fairer than the men, who are mostly of a deep, healthy, brown color.

The children are neglected in point of cleanliness, and it is common to see them thus early afflicted with ophthalmia, which I think partly arises from the flies being allowed to lodge round their eyelids; they appear to become quite insensible to the annoyance, and the insects remain in clusters on their dirty faces undisturbed. In youth, as I believe any kind of education on this Coast is uncommon, they are allowed to run free and nearly naked, and amuse themselves in the water with little boats, which generally are very complete models of the native vessels and well made; this forms a hardy training to fit them for their future occupation, as they are inured to the water, and become excellent swimmers at a very early age.

The Arabs are very dirty in their persons, and rarely wash their clothes, although they feel the consequences as much as other people; and I have seen a man in a passion from this annoyance call for a pot of hot water and strip himself immediately, seeming to gloat on

the destruction he was about to cause. In some cases of sickness, they rub the body with ghee and saffron powder mixed, and allow it to remain on as long as it will.

The houses of the better classes are constructed of stone with flat roofs to sleep upon, without comfort of any kind beyond mats and rude bedsteads: the poor classes live in cadjan huts.

Their diet is simple enough, but wholesome; dates, fish, cakes of flour, and milk, form the principal articles: rice being expensive, is an indulgence with the poor, but they are very fond of it. Pillaw made with fowls or kid, and fruit, form the evening repast with the higher orders. Coffee is drunk at all hours out of small cups of china placed in a cup or frame of silver or brass, according to the condition of the owner. Smoking is common enough, but not on this Coast so much as elsewhere, as some of the Wahabees do not use tobacco at all. They cook in earthen pots, generally placing the fish on the living embers, and so toasting it: at the same time the sides of the pot are covered with their wheaten cakes, which are soon baked: the fish cooked in this manner is very sweet. Dates are abundant and cheap, and form their chief article of food. Fruit is not produced on this Coast in any quantity, but you can obtain limes and melons in the market, and sometimes grapes, which are probably brought from Lingar, or from the interior.

I do not know much of the diseases that prevail amongst the Arabs excepting fever and ophthalmia; the latter is very common, and they say that diving on the pearl banks is the principal cause of it, and of most of their other ailments.

They readily apply for our medical aid, but frequently, after some round-about story about pains and aches, out comes the real business, and they ask for something to increase their power of sensual indulgence, and, of course, go away disappointed.

Fish is plentiful, particularly mullet, which are caught in nets, in the back waters, in great numbers: at sea they take the red rock fish, and occasionally scer fish, and small sharks; dog-fish are likewise very numerous, and the natives appear to prefer them to most kinds.

The birds that are common on this line of Coast, are the curlew, stork, plover, and a small bird called the sandlark: none of them are good eating, generally of a fishy flavor.

Taking the average of the Gulf produce into consideration, the cattle may be pronounced good, but very small. A bullock is seldom found to exceed 200lbs. in weight: sheep and goats are procu-

table. The fowls are good, but smaller than usual, and in great number; eggs, cheese, and butter, are easily obtained.

Indeed, considering the nature of the land, which is a loose sandy desert, it is surprising to find so many articles of consumption; and it argues that the country, not far distant inland, is rich and fruitful, as it is said to be. Tanoun, the late Shaik of Aboothabee, in 1822, offered to escort a party of us to what he described to be an ancient city, situated in a most fruitful country, seven days journey from the sea. I do not know what prevented the excursion, as it was very desirable for many reasons that it should have been undertaken. I have heard also that there is a caravan route from the Coast, which takes its course through a beautiful valley lying between a pass in the mountains, which are seen at Ras-el Keeimah, extending beyond Ras Masandain to Core-facaun, and another range situated more distantly inland, which again appears at the Coast at or near the town of Sohar. It would be a pleasing journey for a couple of officers to undertake, and could be accomplished in the cold weather, I should think, very comfortably from Basidoh in the space of six weeks: a request to this effect from the Resident would, no doubt, meet with compliance from the Shaik of Sharjah.

The whole line of this Coast presents a bold approach, but it is a dangerous lee-shore in a north-west wind, which flows certainly two-thirds of the year; and in the winter months heavy gales come on without further warning than a thick dense atmosphere, and rolling sea setting on shore, which generally precedes the wind a few hours. It is extremely dangerous to remain at anchor on such occasions, and I never experienced a narrower escape from shipwreck than in the *Discovery*, during the survey in February 1822. We had anchored rather close in, wishing to obtain observations of Jupiter's Satellites: the wind and sea set in at midnight, and the vessel drove so, that it was about equally dangerous to make sail off shore, or ride out the gale at anchor. The latter course was chosen, and the top-sail yards were sent down, but in twenty-four hours we parted three cables, so that no alternative remained, and being all prepared, the order to set sail and out the cable was given: the vessel cast the wrong way, and lost considerable ground in wearing round; the driver and jib blew away, and the vessel was buried in the surf under courses, and the fore-top mast stay-sail.

We had only four fathoms water, and every one knew that if it shoaled in the least, the vessel must strike; so much so. that at one time Captain Guy hesitated for a moment whether he should not beach her at once. The Coast was lined with natives, who thought

our fate inevitable. At the time it was impossible to tell how they would act on such an occasion, but I have heard since, that the Shaik ordered every exertion to be made to save the crew, upon pain of death if disobeyed, and this had caused them to collect in such numbers.

The vessel gradually crept off shore, and in six hours, anxiously spent by those on board, we cleared the Coast, having neither anchor nor cable on board; and cruised about until we met a vessel, and obtained what was wanted.

The towns are built close to the different creeks or backwaters: indeed, if it was not for the convenience of shelter afforded to the boats by the latter, this Coast could not be inhabited. Ras-el Kheimah is, from local circumstances, the most eligible place on the Coast for the site of a town, and is gradually increasing again in size and population.

Abothubec is a very mean place, having scarcely a stone building in it; it has advantages, however, from its anchorage near shore and creeks on both sides, that may ultimately cause it to be of greater importance.

The Coast is low with sandy hillocks near the sea; barren, with the exception of tufts of coarse grass, and low underwood here and there, and, in the vicinity of the towns, a few date groves are reared close to the wells.\*

The inhabitants being Wahabees, are generally very strict in the outward observances of religion, never omitting, under any circumstances, their ablutions and prayers at the proper hour. Perhaps they may be considered bigoted and intolerant, and they certainly have no regard for any people not professing the Musalman faith, but they do not carry this into matters of a trivial nature, as they readily partake of food in your company, and permit you to use their utensils in drinking or eating.

The Arabs have mostly one or two slaves in their families to assist them in their daily labor: their kindness to them speaks much in favor of the Arab character, and shows their proper and manly feelings towards mankind in general: the slaves are usually brought up in the Mahomedan religion, and are not unfrequently placed in situations of high trust by their masters. I have frequently seen them in command of boats, and I once happened to be a passenger from the Red Sea in a fine ship called the Nassaur, which was commanded by a young slave belonging to the owner of the vessel, who lived at Hodeida.

\* The fresh water on this Coast is good, except at Chothubec, where it is very brackish.

He could just remember the circumstance of his being kidnapped at an early age, during a thunder-storm when attending some sheep, by a man on horseback, and his subsequently becoming reconciled to his fate by the kindness of the women. Of course he was too young to know much of his own country, although some faint recollections remained, and he thought the trees in the country he came from were larger than any he had ever seen since : he remembered that the men wore feathers stuck on their heads. This, with some other particulars, and the length of the journey, which terminated at Lindee on the African Coast, led me to conclude that he had been brought away from some distant place in the interior of Africa. At Lindee he was sold to his present master, who educated him with paternal kindness, for which he is truly grateful ; and, although now only about 28 years of age, he is entrusted with most valuable cargoes to Bombay and Calcutta.

The Arabs marry at an early age, indeed as soon as they can maintain a family, and generally continue with only one wife, until she has passed the prime of life, when they indulge themselves with a second, if their circumstances will afford it, and perhaps eventually with a third.

I have questioned the natives several times about this practice of having a plurality of wives, and they admit that the women generally live very miserably together, and quarrel with each other incessantly. I remember a very intelligent young man telling me, that he was married to two wives at different ports, and that he kept the fact a secret from both of them, to save himself from annoyance. The women marry as early as 14 years of age, and, if they have many children, break down in their personal appearance very prematurely.

Towards strangers the Arabs evince considerable dislike to any notice being taken of their women, and they endeavour to keep them out of sight as much as possible. It is the custom, when you wish to inquire after the health of a man's wife and family, to put the question in this way, "How is your house?" and any further allusion to them would be taken in bad part. In courtesy the Arabs are formal, and never omit the customary salaam when they first meet another person.

Their burial-grounds are generally situated outside the village, and frequently in neat sequestered spots : the grave is dug about four feet deep, and the head of the corpse is invariably placed towards Mecca ; that is, as nearly as they are able to judge of its bearing from the spot. On the death of a person, the loud lamentation of the

female relatives may be heard at a considerable distance, and their outward manifestation of grief is very great.

The ground is heaped up over the grave, and a flag stone is placed at the head and foot: they sometimes erect small mosques, covered with a dome, over the remains of their rich or distinguished men.

The *pearl fishery* commences in June, and is continued until the equinox in September. During this period the water is very warm, and seldom disturbed for any length of time by the wind. The weather is excessively hot, and rendered truly oppressive by the dense state of the atmosphere.

The pearl bank extends from Sharjah to Biddulph's island, a distance in a straight line of about 330 miles. The bottom is sand and loose coral, and the depth of water is from five to eighteen fathoms, but very irregular.

The number of boats that are employed in the fishery throughout is said to be 3000, which are principally fitted out from Bahrein and its dependencies, from the towns on the pirate coast, and from Lingar and Assalow on the Persian side, as the right of fishing is free to all in the Persian Gulf. The boats are mostly small, with a crew of about seven men. However, there are many vessels that are about 50 tons, and have a crew of fourteen or twenty men.

The boats that are sent to the fishery from the pirate coast are generally found in fleets, averaging from seven to twenty, employed about the islands formerly called Maude's Group, which is the widest part of the pearl bank: they seldom or never proceed higher than the Island of Hallool. It is their custom to remain at sea until the boats are laden with oysters, and then to proceed to a convenient island to open the shells; and, from the large heaps which I observed on Sir Beni-Yas, Zurkoh, Surdy, and Seer Abonnaid, I conclude that these are found to be the most convenient islands for this purpose.

Above Hallool, and as high as Katif, the pearl bank at this season is literally covered with small fishing boats from Bahrein and its dependencies; and, not possessing here so many convenient places for opening their oysters, they are obliged to be continually running in and out of the port of Bahrein; but this is not of much consequence, as the best fishing ground is found in the vicinity of their own coast.

When fishing, the vessels anchor on the bank in various depths of water, from five to sixteen fathoms. The crew then commence the work by dividing themselves into two parties, as they are nearly all equal to the business of diving, which is described by the Arabs as the most fatiguing work. One party remains in the boat to receive

the oysters, and to haul up the divers; the others strip naked and place their feet upon a stone weight, which is attached to the end of a line made fast at the other end to the boat: retaining hold of this with their hands, and being provided with a basket or net to put the oysters in, they are lowered down to the bottom by those on board; after filling the basket, which will contain seven or eight oysters, they jerk the line as a signal to the men on board to haul them up again, which is done as quick as possible.

When diving they make use of a piece of horn to close the nostrils, to enable them to breathe longer, which likewise prevents the water getting up the nose; this is about the size and form of a common wine bottle cork, with a notch at one end cut in the centre, so as to fit remarkably well: they continue down about 40 seconds in ordinary depths of water. I never saw one of them remain above a minute. On rising to the surface, they cling to the boat for rest, for the space of about three minutes before they dive again. In this way they continue at work by relieving each other, until their boat is filled with oysters.

When the fleet is laden, they direct their course to some neighbouring island, and secure their boats under its lee; the oysters are then landed from the boats, and the sails, oars and yards, are formed into tents, to protect fishermen from the insufferable heat of the day, and glare of the sand. We frequently visited their little encampments, and on some occasions bought a quantity of unopened oysters to try our luck, which they parted with at the rate of two dollars a hundred without much hesitation. I am inclined to think this is a fair valuation, as the result generally left it doubtful whether we had the best of the bargain; for from this quantity we usually obtained two or three small pearls worth about a dollar each, and I have known them to offer the money back again for them.

For opening the pearl oysters they use a common claspknife, and are very quick and expert; the pearl is found adhering to the cartilage, or hard part of the oyster which is attached to the shell.

During the fishing season the boatmen live on dates and fish; the latter are every where abundant and good. It is really an act of charity to add a little rice to their repast, for which they are always very thankful, and in return will give you every information they can about the fishery.

On one of these occasions, I questioned them regarding the danger they incurred from sharks when diving, as they are exceedingly numerous. They said it was not uncommon to meet with accidents from them, but described the risk as nothing when compared to the



danger they encountered from the saw fish.\* Many of the divers said they had seen people cut absolutely in two by these fearful monsters.

The Arabs describe the diving as very injurious to their health, and this usually shows its effects in their appearance. They are very much reduced, and suffer likewise from inflamed eyes: for which disease they apply antimony as a remedy. I shall here observe, that the use of antimony applied to the eyelids is general amongst both sexes, as they are always found provided with a small tin box, which is frequently inlaid with gilt and full of this powder. In using it, they smear the end of a smooth rounded piece of mother of pearl, and apply it to the inner part of the eyelid.

The islands afford perfect shelter to their boats during the strong north-west winds, which occasionally come on even at this season; but unfortunately they are mostly destitute of fresh water. At Sir Beni-Yas there is a beautiful lagoon with five fathoms water, situated on the south side of the island; the entrance into it is narrow, with only three fathoms water, but quite safe. It is much resorted to by the pearl fishermen, as the surface is always perfectly smooth, being entirely landlocked.

On the island of Surdy, there are some wells of fresh water; and it is to be regretted that there is not good anchorage. A ledge of coral rock extends about two cable's length from the island, with eighteen fathoms within a quarter of a mile of the shore, shoaling rapidly towards the beach; upon the margin of this vessels anchor, but it is too close in to be safe. The remains of a town are found here, and one or two buildings stand entire at the present day. It is much frequented by the Arabs, who dry their fish there in very large quantities.

The mineral specimens that I can call to memory as common to the islands, are trap, volcanic rock, gypsum, granite, sandstone, antimony, and iron ore.

The appearance of these islands viewed from a distance is highly interesting, owing to the very curious form of the hills, and the variegated color which they present. A scientific account of them would, I dare say, afford much new information; but I have merely alluded to them, with a view to convey a general idea of the islands.

The value in money of the pearls that are obtained throughout the Gulf during one season, is calculated at forty lacs of rupees.

During the fishery, Bahrein and its dependencies employ	2430	Boats.
Sharjah Ras-el Kheimah. ditto	350	
Aboothabee and other towns of the Pirate Coast, about	350	
Towns on the Persian Coast, about	100	

Total number of boats employed . . . . . 3230

The smallest boats employ five men, and the largest about eighteen. The former are the most numerous; therefore I think if the average number of men be estimated at nine to each boat, the result will give a very near approach to the correct number employed in the fishery.

Total number of boats employed . . . . . 3230

Average number of men in each boat . . . . . 9

Total number of men employed . . . . . 29,070

Each boat pays a tax according to its size and the number of men, from one to two dollars to the Shaik of the place they belong to.

The crew are never hired for fixed wages, but have certain shares of the produce, regulated according to the expense and risk they incur in the outfit of the boat, or their expertness in the fishery as divers.

The Hindoo merchants purchase up a great part of the pearls, and export them to India. It is supposed that three-fourths of the produce is thus disposed of; the remainder is sent into Persia, Arabia, and Turkey.

The Arabs in the Gulf consist of so many different tribes, and being generally actuated by feelings of animosity towards each other, from the recollection of former feuds, it is not to be expected that peace and order can be maintained amongst them during the fishery, as various parties are huddled together frequently on the same island, which they resort to for shelter, or for the convenience of opening their oysters. Plunder and strife is therefore not uncommon, and it requires much vigilance on our part to suppress it, and to do this effectually, it is absolutely necessary to have two vessels on the pearl bank for the purpose.

[ This, in the first edition of the Geographical Transactions, is marked "to be continued." But on searching the Society's repositories no continuation appears of the MSS. of Lieut. Whitelock. In the Catalogue of papers belonging to the Society, it is mentioned as having been "lost during the sickness of Dr. Heddle." The subjoined paper is probably the next in the sequence to that now missing. It has not been before printed. G. B. Secy.]

## DESCRIPTION OF THE ARABIAN COAST.

Cosaab is a small village situated in the bight of a large cove, surrounded with hills except on the north-west end. The inhabitants are about 50 or 60 in number, belonging to a tribe called Beni-Showa, and Beni-Hebeah, a branch of the Joasmee tribe. There is a small grove of date trees, 10 or 15 houses, two miserably built forts, 4 guns in one, and 2 in the other, old and rusty. Their principal trade is with the island of Kishem, and coasting boats; they give fish in return for articles received. Water is obtained from wells.

From Ras-el Kheimah to Coomza, are several small villages in the different coves as seen in the chart; the whole of these villages are inhabited by the Joasmee tribe.

From Cosaab to Raumps are several ancient buildings of the Persians called *Senems*, (an idol or image.) They used to worship their idols in these buildings, until the Wahabees destroyed them some years ago. Most of them are in ruins at present.

In all these coves or bights, water is to be obtained from the wells close to the beach; they afford good shelter from the N. Westers.

From Ras-el Kheimah to Amulgawein are two coves famous as the resort of the pearl divers, who take shelter in them during bad weather. They open the oyster, clean and divide the pearls. These coves are called Muzahma, and Lubeydha; the former is situated a little above the town of Ul-Unirah, the latter leads to Amulgawein, abreast of an island called Ul-Umrah. On this island is a town called Sibini. These places afford excellent shelter from all winds.

In cove Lubeydha there are springs of fresh water underneath the salt; these springs extend from this cove to Bahrein, supplying water to the several towns on the Coast; they obtain the water by means of a wooden pump lined with lead.

Along this Coast from Coomza to Debay are date groves extending about a quarter mile inland; there are wells all along the different roads in the interior, situated at convenient distances. The currents are very strong on this Coast running  $2\frac{1}{2}$  or 3 knots.

The inhabitants of this coast from Cape Masandam to Sharjah or Debay, are of the Joasmee tribe. They are professed pirates, and it is only a fear of the English that checks them. They commit small piracies among themselves daily. They are a cruel vindictive set, very indolent; they never work until absolutely obliged, and then they work hard. The difficulty is in getting them to commence. They are better sailors on this Coast than the Batnah; the latter are not so much accustomed to boating. They are extremely suspicious of each

other, and never can conclude a bargain without having recourse to a third person. They are extremely fond of coffee and smoking; the lower classes even have their coffee three or four times a day.

After the afternoon prayer, they assemble together and chat over their coffee, either on business or on pressing occasion until market time. All go to market whether they wish to purchase any thing or not. It is a place for the resort of the idle, who talk over the news of the day. It appears to be a place of recreation after a day spent in idleness. Their markets are pretty well furnished. Bullocks are often killed in large towns, where the consumption is great, but in small towns only kids or goats, the purchaser engaging to take a certain quantity beforehand, so that they never kill more cattle than is actually required.

They have very few amusements; frequenting the coffee-houses, and gambling, seem the only amusements they are particularly fond of.

They are Sunnites on this Coast. They pray five times a day; at daylight, 2 P. M., a little before sunset, at sunset, and before they go to sleep. During the recital of their prayers, they are constantly attending to whatever is going on around them, and seem to have their attention fixed on every object except that which they are about. They will yawn, pick their noses, and sometimes turn around and talk to a person. They appear to say their prayers parrot-like, and consider it an irksome duty, but they never neglect to say them. A camel-man will stop on the road, a boatman will lower his sail or anchor, if the weather renders it necessary, to say their prayers. They always wash their hands and feet preparatory to prayer and adjust their clothes, &c. They have a short prayer which is bawled out by the priest to give them notice in order to prepare themselves for prayer.

The females on this coast are the only industrious people. They perform all the work either indoors or out. They carry water, milk the goats, spin and cook, go to market, bring fire-wood, &c. &c. while the husband is in the coffee-house.

The husbandman, from the nature of his employment, is also obliged to be industrious; they water their gardens twice a day; a little before daylight, and at 3 P. M.

Whenever an Arab wishes to honor a visitor or guest, he seats him on his right hand. Coffee, sherbut, and sweetmeats, are then brought in. If he is a foreigner, a table or large dish is loaded with fruits of the season and brought to him. No one sits down until the visitor or guest is seated. Whenever a visitor or principal man enters, the whole of the company rise to salute him.

When a Shaik or principal man is sick or indisposed, he always shuts his door; a hint well understood, otherwise they would stalk into the house without ceremony.

When the Shaik, or head man dies or marries, they prepare a large dinner for all who may come. The relations, and most of the man's acquaintances, always attend the funeral, or wedding. When a man does not go on these occasions, it is thought unkind, and sometimes considered as an insult.

They will show a foreigner all over their town, the mosques, forts, &c. and every place that they imagine he may wish to see. A letter of introduction from a friend is the best passport you can have. You are quite safe if you possess such protection, for to injure or harm a person who enjoys the Shaik's or principal man's protection, is severely punished. The Wahabees are more particular in this point than their neighbours.

It is an erroneous idea to imagine a person can gain more information, or see more of the country and inhabitants, by wearing a native dress, for unless he keep up a splendid establishment, the principal men consider him as nobody, and seldom deign to look upon him. All the information he would gain, would be from the lower classes, who care not how many falsehoods they tell, and are very ignorant. They generally pretend to know every thing, but in reality know nothing. They are seldom at a loss for a name for any thing, for their language affords them ample means.

*Trade of the Coast.* The trade carried on on this coast is extensive. They trade with Basra, and Bahrein, the Persian and Mukran Coasts, Muscat and the Batnah Coasts, Bombay, the Red Sea, Zanzibar, the African Coast, and in the interior of Oman.

The articles received from Basra and Bahrein, are dates, horses, donkies, camoleens, made of camels' hair or wool, &c. &c.

From Persia, powder, tobacco, carpets, cloth, sugar, swords, jambeah's, and matchlocks; also from the Coast near Lingar and Shenass, onions, &c. &c.

From Mukran, iron, ghee, sugar, oil, and carpets, &c. &c.

From Muscat, rice, ghee, sugar, cloth, and indigo, &c. &c.

From Batnah, dates and ghee.

From Bombay, iron, rice, brass, steel, cloth, thread and needles, cotton and yarns, &c. &c.

From Yemen, coffee and slaves.

From Zanzibar, slaves.

From the African Coast, most of them buy their slaves at Muscat; there is a duty on slaves at Muscat, a dollar per head for every African and Abyssinian, and 2 dollars for a Georgian or Armenian.

They treat their slaves very well on this Coast, as well as in other parts of Arabia.

The following articles they give in exchange for those imported. Pearls, dried fish, (the fish are considered superior on the Coast to any other part,) cheese, confections made of wool, almonds, &c. &c.

The Shaiks of the different towns on this Coast, receive a tenth on all goods landed, and a tenth on dates except at Abothubee, where there are no dates, in consequence a man is furnished by the tribe to go for pearls in each boat; all that these men obtain, belongs to the Shaik as his revenue.

They have on this Coast a great number of boats, beteels, fishing boats, and some buggalas. The pearl banks extend from Ras-el Kheima to Grane; the oyster every year or so, shifts its bed and goes to another place, which is the reason of the boats coming in contact with each other; whoever is strongest generally robs the weaker of his pearls.

Abothubee is inhabited by the tribe called Beni-Yas, a determined set of pirates, they rob and plunder all who may come in their way. This tribe formerly used to pay a tribute to Fasyi-Ben Turki, but for these last few years they have ceased to give this tribute and have made themselves independent, seldom holding any intercourse with the Wahabees at present.

Their chief article of trade are pearls. They purchase (or give articles in exchange,) dates, ghee, swords, matchlocks, iron, &c. &c. They trade chiefly with Muscat, Bahrein, and Basra. They are a powerful tribe possessing several places on the Coast.

Grane or Quoite, is inhabited by the large and powerful tribe, called Attubee, divided into several small ones; their territory extends through Nejed, Bahrein, and along the Coast to Grane or Quoite. At Grane there are no date groves. The people live on fish and dates, and water is scarce. They have several boats which they send up and down the Coast. They pay a tribute to Fasyi-Ben Turki, Chief of the Wahabees. There is an old building of the Portuguese here.

*Bahrein.* There are on this island no less than 16 different clans, all sprung from the Attubee tribe. Attoob is the name of the ruling tribe. Bahrein is said to yield a revenue of two lacs of rupees; it is said there are 15,000 men on this island. In Bahrein itself the population is estimated at 9 or 10,000 men. The present Shaik is a descendent of Ahmed; his father was a resident at Grane formerly; he was of the Attubee tribe. He was not a rich man at that time. He

carried on a small trade with the Persian Coast. At the commencement of his career he quarrelled with a man belonging to Congoon and killed him; he immediately absconded and went back to Grane. The Congoon people having gained information of where the murderer was, wrote to the people of Grane to deliver him up to them, if they did not, they threatened to destroy all the boats they fell in with, and kill their men. The Grane people were afraid at this threat, and entreated Ahmed to find some other place to reside in. He asked them if that was the custom of their forefathers, to give up a man after once affording him protection. They told him it was not, but urged the necessity of his leaving, otherwise their trade would be destroyed, and so forth. He left Grane, and went to a place called Guttah, a day's journey from this island, on the Coast. At this time he was possessed of about 1500 dollars; he bought one or two small boats, and sent them for pearls; by this means he became rich by degrees, and by giving presents and feeding the poor became powerful, they all becoming his followers: men from other towns began to flock to him for protection. After four or five years he built a strong but small fort, and purchased some larger boats with which he carried on more extensive trade. He also bought 200 slaves from Muscat, and furnished them with arms.

He had four sons, all of whom married. The number of his followers soon increased, and he became as rich as well as a powerful man. Bahrein at this time was occupied by Persians; whenever they met any of Ahmed's men in their town, they used to treat them with abuse, and strike them. The men constantly complained to Ahmed of this treatment; at last, Ahmed wrote to Bahrein to tell them, that he was not able to tell whether they were his friends or foes, but if they would, instead of abusing his people, kill some, he should be able to know, and treat them accordingly. It appears that shortly after this letter, they did kill some of his men, which so enraged his people that they begged him to let them go and take revenge, to which he readily consented. He prepared his boats and supplied his men with arms, and started so as to get to Bahrein in the night time; they completely surprised the inhabitants, killed a great number and plundered the town: they went back after this to Guttah. Ahmed from his trade and his share of the plunder became rich. He was now looked upon as a great man. He gained a great number of followers by giving them presents, &c. The king of Persia on hearing of the capture of Bahrein, equipped some large boats with arms, ammunition, &c. and sent 2000 men to punish these men of Guttah; when the boats came and the followers of Ahmed saw their number, they determined to

fight them in open field. The Persians were defeated. After this battle, Ahmed and his family and followers went to Bahrein to settle; he had gained the hearts of his followers, and they unanimously elected him Shaik. After his decease his eldest son succeeded him. The second son died; and now his fourth son Abdullah is Shaik.

Abdul Rahman, his third son, succeeded his elder brother, and built the fort on Maharag, after his war with the Imam of Muscat. His brother and most of his relations, were at Devyeh under Tunki-Ben Saoud's authority, Chief of the Wahabees. They managed to make their escape one night, and by taking different roads, reached Bahrein in safety. On the return of the younger brother, his first act was to usurp the government, which he has held ever since. His elder brother, Abdul Rahman, died lately. This taking of Bahrein happened about 50 years ago.

At present Bahrein is falling of; it was a flourishing place a few years ago. The houses are mostly in ruins at present. The rent of a large house now is about one dollar a month, when formerly you could not get a house for eight or nine dollars. This change may be attributed to the feeble government of the present Shaik, who is a very old man, and not fit to govern such a large town. His followers do just as they please, extorting money from all they can, and lording it over poor and rich in a most despotic manner. If they meet a person riding on a donkey or camel, and they do not possess one, they immediately tell him to dismount, as they require the beast on the Shaik's business. They are obliged to submit, and the fellow takes the donkey or camel to whatever town he pleases. The owner is often obliged to go from one town to another in search of his beast. There is no Police, and in consequence a moneyed man is hourly in danger of losing his property. It is of no use to complain, for the Shaik only tells them to keep out of his followers' and sons' way. In consequence of this misrule, few moneyed men will remain; they go to other places where property is better secured, and where they will not be trampled upon by slaves and menials. The bazar people are oppressed in like manner by the slaves and followers of the Shaik, and by his sons.

Bahrein is not governed by one, but 7 persons who all style themselves Shaiks, viz. the father and his six sons. Each does just what he pleases; all extorting what money they can from the merchants.

There are no less than 36 different towns on this island at present; formerly there were more, but many have fallen into decay, and be-



come uninhabited. There are no traces left of the Portuguese having been here, except an old ruined fort, and a reservoir of water. This reservoir is kept in repair, and supplies the different towns with water.

The Persians were in possession of this island a hundred years; it was first taken when Nâdir was Shah of Persia, and retaken in Sadir Khan's time, twelve years after the death of Kerim Khan. They pay a tribute to Fasyl-Ben Turki; the sum is not stipulated, but they generally give him as much as he asks for. All the different tribes inhabiting the island unite together in time of war; they receive no wages, but have their provisions found; each man finds his own weapon, and when the war is over they separate, each man returning to his own house.

The island produces dates, limes, oranges, figs, pomegranates, almonds, peaches, and grapes; also a few onions and vegetables.

The imports are, rice, sugar, cloth, indigo, iron, brass, ghee, &c. &c. and timber from the Malabar Coast. Dates, ghee, &c. &c. from Basra. Sugar, cloth, powder, swords, matchlocks, &c. &c. from Persia.

From the interior, Lahsa, Devyeh, Azeer, or Ajeer, goats, sheep, bullocks, cows, camoleens, datës, donkies, horses, &c. From Khosroon, tobacco and onions from the Persian Coast. They give in exchange, dates, camoleens of wool, pearls, dried fish, &c. &c.

Manna is produced in Nejed, and is sometimes sent to this island. There are no fixed duties on imports and exports, whatever the Shaikh and his sons can get, they take. The Shaikh receives a tenth on all date trees. They never lay out any of this money to repair the roads. The Shaikh has few expenses to defray; he has no army to keep up; his slaves pay themselves by stealing.

Sugar and indigo do not grow on this island. Bahrein is quite independent of Muscat. They have some large buggalas which make two trips to India, in the beginning of the N. E. monsoon. They take dates, horses, pearls, and dried fish, and bring back, rice, cloth, indigo, thread and needles, &c. &c. These boats are built expressly for this purpose, and for war.

*Nejed.* Rhyudh is at present the residence of the Wahabee chief, a large town, with date groves, &c. &c. Devyeh is falling into decay fast. The country is fertile in certain spots, like Oman, where the towns are situated, and where water is said to be plentiful and obtained by digging wells. The whole of this country is in the hands of the Wahabees. The other tribe, are the Attubee; they profess to be Wahabees in public, and conform to their religious ceremonies from fear, but are Sunnites at heart. In private they follow their own religion.

Rhyudh is a day and half's journey from Devyeh. The Wahabees are cruel to all who are not of their religion, putting to death all who are Kafirs, regardless of sect, men, women, and children. It is against their creed to smoke, yet all smoke in private. When they are away from their country, they will smoke in public. There are no manufactures in Nejed; their swords, matchlocks, &c. are brought from Persia. They try to obtain English made swords, guns, &c.

The language spoken in Nejed is very pure Arabic; there is no intermixture of other languages, but pure from the Koran. They teach their children to read and write, at least all who can afford it. The tribe inhabiting Salisa is a branch of the Attuhee, called Assowee.

Lahsa is a large town two days from Ajeer, and Ajeer is one day from the Coast. The country is very fertile; they grow dates, &c. Cattle, horses, donkeys, manna, bullocks, hides, &c. are procurable at these places. Rice only grows at Lahsa. They trade chiefly with Bahrein, and the coast of Yemen, &c. receiving Hindoostance goods, coffee from Yemen and articles from Persia, as swords, powder, &c. Rice is sent from Lahsa to the neighbouring towns in the interior. They demand tribute on all imports, no stated sum but according to the value and quantity of articles imported. This duty is collected at Lahsa, Katiffe, and Rhyudh. All the towns in Nejed pay a tribute to Fasyt Ben Turki the chief, who pays a tribute annually, of 25,000 dollars to Mahomed Ally, Pasha of Egypt.

Barley and wheat grow in Nejed, and excellent tahn. Their camels are considered inferior to those in Oman as to speed. The roads are quite safe for a caravan, but not so for only one or two persons travelling, as the Bedouins often attack a few, and rob and plunder them of all they have. They say that there are in Nejed about 150,000 Bedouins belonging to the same tribe as the town people.

The treatment of a foreigner depends on his letter of introduction. If he is so lucky as to get a letter from a friend of their chief, he is treated with great hospitality, has a guard of honor to attend him wherever he may please to go, and a horse at his command, &c.

The pilgrims from Persia, Bahrein, and the Coast, start for Mecca two months before the Hyjje month, so as to reach Mecca at the time. The journey is only a month, but from delays at different towns it takes two months to accomplish it. Pilgrims pay at Rhyudh a sum of money according to their means, that is a dollar per camel.

Horses are the chief article of trade. They feed their horses on camels' milk when young. When old enough to ride, viz. 30 months,

they commence training them for war, by accustoming them to strange sights, all manner of noises, firing of matchlocks, war songs, drums, &c. When the horse can bear these sights without being frightened, he is considered as trained for a war horse, and a price put upon him. They expose them to all weathers, hot or cold; they never protect them either from the sun during the day, or the cold at night. They never clean or rub them down. They never load their horses, and only make use of them in war. The prices are various from 50 dollars to 2 or 3000. They keep mares expressly for breeding, noting the time of the mare's delivery, &c. When this happens they assemble a number of witnesses, writing down the horse's and mare's names, date of delivery, &c. They are very careful in keeping an exact account of a horse's pedigree. They will not allow any intermixture to take place.

Butter is the article they generally give to horses when out of order; they are never shod.

Donkies are brought from Lahsa and the interior to the Coast for sale; they are fine large animals, and can undergo a great deal of fatigue, journeying with loads from  $2\frac{1}{2}$  to 3 months at 15 or 18 miles per day. They do not allow any intermixture. These Donkies vary in price like the horses.

## II.—*Memoir on the Inhabitants of the Maldiva Islands.* By Lieutenant I. A. Young, I. N., and Mr. W. Christopher, I. N.

Presented by the Right Honorable the Governor in Council.

Owing to the want of accurate and particular information respecting the position and dangers of the groups composing the Maldiva Islands, any near approach to them is generally avoided by navigators, except in passing through one wide channel, in the parallel of  $1^{\circ} 30''$  North latitude. Hence the islands being seldom visited, their productions, and resources, the language, disposition, customs, &c. of the inhabitants, have remained nearly unknown. It appeared desirable, therefore, when the Honorable Company's Ship Benares was sent to survey the islands, that as much information as possible should be collected regarding those subjects. But the nature of the surveying duties would not admit of familiar intercourse with the natives, for the vessel remained so short a time at any one island, that the jealousy and suspicion with which the natives regarded her presence, were scarcely overcome before it became necessary to

proceed to some other. We volunteered to remain at the islands on the return of the Benares to Bombay, with a view to learn the language, (which was the principal object,) and to gain whatever knowledge we could of the laws, customs, &c. of the natives. The permission of Government having been received from Bombay, we took the opportunity, while the Benares was at Cochin, to make such preparations for our stay on the islands as seemed necessary, providing ourselves, at the same time, with a small supply of vegetable and fruit seeds of which, however, we had not the satisfaction of distributing more than a small portion amongst the islanders, the greater part having been destroyed by vermin on ship board. On the return of the Benares to Malé, or King's Island, (so called from the residence there of the Sultan,) we landed under the directions of Captain Moresby, and communicated with the authorities, who procured us permission to remain on the island, and an audience of the Sultan, at which we were well received. The preliminary arrangements settled, we sent our things on shore, with the men from the ship whose services we were permitted to have, and took up our abode in the building assigned to us, on the 4th June, 1834, and on the 8th the Benares left Malé for Bombay.

During our stay on the islands we kept a journal, from which this Memoir has been compiled, containing such information as we were able to collect, together with a narrative of our personal adventure. That this memoir is very imperfect, and the information in it very defective, we are too sensible; but we hope some allowance will be made for us, in consideration of the short period of our residence.\* Much time was necessarily spent in acquiring a sufficient knowledge of the language for communicating with the natives, and the period which we intended to devote to collecting information on the above points was curtailed in consequence of our sickness, which eventually compelled us to quit the island.

\* We had been only three weeks on the islands, when Lieutenant Young was taken ill with fever, from which he was suffering, when Mr. Christopher left Malé on the 7th July in a native boat, in company with a public officer, who was deputed by the Sultan to render assistance to the crew of a vessel, (which proved to be an English Schooner, the Adonis from the Mauritius,) wrecked on one of the islands of the Collomandou Atoll. Thence we returned on the 28th of July; Lieutenant Young, who was confined to his bed all that time, was forced to quit Malé on the 17th August, with the men from the Benares, all of whom had fallen sick. A few days after their departure, Mr. Christopher was taken ill, and after struggling against the fever for some time, he was obliged to quit the place which he did on the 9th September, 1835.

There are in the Attol where the Sultan resides, about fifty islands, none exceeding three miles in length, and one in breadth. In consequence of their lowness, not being in general more than five feet above the level of the sea, on first approaching, one would imagine them to be clusters, or rows of cocoanut trees, growing out of the water. No ground is found with the lead at 200 fathoms depth, close on the outside of the coral banks and islands. The descent was very abrupt, but it was never observed that the rock curved in below the surface, towards the centre of the Attol, so as to lessen the base. The natives are of opinion, that the islands decrease in number, and gradually waste away, by the constant action of the surf; but individuals who have stated this, have also acknowledged, that within their own recollection, barren sand banks have become habitable islands, thickly covered with fruit trees, &c. Of the increase of a sand bank, one of us (Mr. Christopher) witnessed an indisputable proof: on a bank which had risen from the centre of a reef, of nearly circular form, and half a mile in diameter, and which had at the time attained an elevation of five feet above the level of the sea; a piece of driftwood was observed buried two feet under the broken pieces of coral and sand which composed the bank. On the outer edge of this reef (between which, and the bank, there was a channel a few hundred yards broad and twelve feet deep) the branch coral had nearly risen to the surface, so as to receive and break the force of the surf.

In fairness to the natives it should, however, be stated, in reference to their opinion mentioned above, that, on one occasion, he (Mr. Christopher) observed the roots of the cocoanut trees *below* high water mark, the trees having been destroyed by the salt water. On another, he saw cocoanut trees growing, the roots of which were laid bare by the water; and another fact noticed by him was, that of a mosque at Malé being disconnected from the island by the surf washing away the intermediate sand.

The island of Malé, where the Sultan resides, is situated about the centre of the Attol. On approaching it, the view is of the same character as that of all the other islands; but, on nearing it, boats are seen at anchor off the town, which consists of huts raised under the shade of the spreading branches of the cocoanut, and surrounded by fruit trees of various kinds. The town is regularly laid out, the streets being straight and long, running in parallel lines, intersected at intervals by others at right angles. The houses have, in general, a yard, or compound, attached where fruit and flowers are produced. One of the latter, the jessamine, is very plentiful, scattering, when

blooming, a delicious perfume through the streets. The island of Malé is about one mile in length, by three-fourths in breadth. It is surrounded on three sides, by a wall of coral, about 150 yards from the beach, and nearly all dry, which, being roughly built up occasionally with a little labor, affords excellent shelter to the boats of the natives, there being from six to twelve feet depth of water within it on the northern side. On this side stands the principal fort of the island, equi-distant from the eastern and western extremities. The other defences on Malé are scarcely worthy of remark. The fort, being at present filled up with earth, is a solid mass, in height about twenty feet, faced with stone, and on it are mounted ten guns, which, though very old and almost useless, are taken care of by being covered in. As no native inscription is to be found on this fort, similar to those on the bastion built at the angles of the wall that partly surrounds the islands, and as it exhibits signs of more skill than has been evinced in the other defences, which appear to have been constructed by the natives, having a round front and a gentle slope upwards from the inner line of the base, it seems probable that it is an erection of the Portuguese. It is surmounted by a high flag-staff, and on either side a wall with bastions at intervals extends from it, stretching along the beach, and inclosing the island on all sides except the south, which is inaccessible to boats, owing to an unbroken reef nearly dry, running parallel with the beach at a distance of three hundred yards. The wall, however, is at present in ruins, though it must be a comparatively late work, since it does not appear from Laval's book, that it existed when he was on the island. The Sultan's palace is a large upper-roomed house, with a peaked roof, covered with thick sheet copper in a walled enclosure, which is surrounded by a shallow moat, comprising an area of about a quarter of a square mile. Within this space there is also a well built magazine, besides several other houses, and a neat building raised on stone arches, from which the ladies witness the games exhibited before the court on festivals. One of the above mentioned buildings is said to contain a variety of arms, and relics taken from wrecked vessels; and it is currently reported and believed, that there is a tank near the palace filled with ambergris.

We were at first accommodated in a house belonging to one of the Viziers, or Sultan's counsellors, situated without the space enclosed by the moat, having a small compound, in which we put down some pine-apples, melons, yams, &c. but we were not long enough on the island to witness the result of our labor, though, while we remained there, the young plantation seemed to be thriving. The situa-

tion of the house was in some respects a good one; but it was so surrounded with trees, that there was not a free circulation of air. On this being represented by us to the authorities, they most kindly offered to erect a house on whatever spot, we might select, and we pointed out one, which was open to the breeze, and in a retired situation; but as it was out of the town, it did not suit the head people, who said they wished us to live amongst them, stating as a reason that they could then better learn, and more readily attend to, our wants and comforts. We willingly acceded to their wishes and were shewn a house belonging to one of the Viziers, which, after a few slight alterations, made a comfortable domicile. It had a boarded floor raised on piles about four feet from the ground, and being in a tolerably good situation, the circulation of air was not much obstructed.

Laval states, that much of the water on Malé was unwholesome, and that he esteemed it a privilege to be allowed to have a supply of the water which was used by the head people. We found wells very common all over the island, few compounds being without one; but we never heard that the natives entertained such an opinion as he has expressed, respecting the quality of the water. Our host, the Vizier, and his family used the water of the well in the yard, and we followed their example. Mr. Christophet, however, carefully abstained from drinking unboiled water during the whole of his residence; but as his health was better on landing, this fact alone may be insufficient to account for his preserving it longer than the rest of the party.

The inhabitants of these islands have, in general, a pleasing cast of countenance, and in color they much resemble the Musalmans of India. Their general height is below the European standard, about five feet two inches. On Malé many exhibit, in their physical conformation, an admixture of the African, doubtless from the Zanzibar slaves, occasionally imported by the Muscat vessels; but the proportion of persons of this description to the whole population is inconsiderable. Some individuals here of the higher orders have a much fairer complexion than the common people, which is, probably, attributable to descent from Persian stock. It is a remarkable peculiarity that the skin of the natives almost universally, is marked with stains on many parts of their bodies, or blotches of a lighter color than the natural skin. The ordinary dress of the men consists of short drawers, with a cloth wrapped round the waist, and another about the head, the waistcloth being twisted into a knot in the

front, which is supported by a string encircling the loins. The head people wear, in addition, an embroidered sash of silk or cotton about the waist, and on Fridays, when attending the grand mosque, a kind of shirt (white) reaching to the ankles, with a turban of the same color. The men shave their heads, but are free to allow as much of the hair of the face to grow as they like. The women's habiliments consist merely of a cloth wrapped round the waist, descending to the knees, which is secured by a string, and a long shirt: also a cloth tied round the head. In contradistinction to the men, they allow their hair to grow long, and fasten it up behind. Like their sex everywhere else, they are fond of ornaments for the person, though the number and variety of articles for this purpose which they possess, are very limited. They wear bangles, &c. and their ears are pierced when very young, all round the edges of which they hang light trinkets. The men wear none.

Their houses are ill built and dark, having at most only one small window, and frequently none at all; in fact, they are but large sized huts with a peaked roof. In general about twenty-eight feet long by twelve broad, and fifteen feet high to the top of the roof. They are made of a substantial frame work of wood, thatched all over with cocoanut leaves; the floor is plastered, and the sides are sometimes boarded; a partition near the middle divides the house into two rooms, one of which is private, and the other open to all visitors. In this public room there are two ranges of seats; the one on the right side on entering, is considered the most honorable, and the other on the left, (carried across the house,) is appropriated for the common people. The degree of respect intended to be shewn to any individual, is marked by the seat to which he is invited. Inferiors always receive the king's relations, and other head men, standing, and remain so while they are present, unless invited by them to be seated. Some of the houses contain a few articles of furniture, such as a small table, chairs, and boxes or trunks. Though it would be thought improper to enter the private, or women's apartment, females are not kept from the view of strangers, or in a state of exclusion, as in most Mahomedan societies. They enjoy every reasonable liberty, of which, as well as of the kindness of their dispositions, we had a pleasing evidence in a visit which we received from some ladies of rank during our sickness. They do not, however, eat along with the men, but after them. Marriage is not very early engaged in, but a plurality of wives is allowed: few, however, are able to support more than one wife, which decidedly contributes to the happiness of both parties. So far as we could observe, there prevailed, very ge-



nerally, a mutual affection between husband and wife. Intrigues, however, are not uncommon, and the men show no small ingenuity in carrying them on, when the illicit correspondence is with a married woman. For a widow to live with a favorite without marriage, is not accounted criminal, and scarcely disgraceful. What is very remarkable, however, is that there are none of that degraded class of human beings, professed prostitutes, on these islands. Children of both sexes are required to read the Koran through, under the tuition of priests of the inferior order, and their lesson is begun very early,—at three years of age. To be able to read, is all that appears to be thought necessary, and it is not pretended that more is attempted to be taught. When once through the Koran, the children receive no further instructions, except being initiated in the ceremonials of religion. The teachers are permitted by the parents to use a barbarous mode of punishing the children, if they show an aversion to learn Arabic, namely, that of squeezing lime-juice into their eyes, besides flogging and beating. As this cruel practice does not accord with the general character of the people, it is probably permitted only under a deep sense of the great importance of that branch of education in a religious point of view. As to a knowledge of writing, the children are left to acquire it themselves, if they feel inclined, in the best way they can, and hence arises the great difficulty experienced in determining either the true sound of letters, or the orthography of words. Most of the boys, however, from a prevailing passion for music, soon gain a knowledge of the character, as all songs are written in it from the Persian or Hindoostanee, there being very few in their own language.

The young children are covered with ornaments of different metals, according to the wealth of the parents, to distinguish them from those whose parents are poorer. All go unclothed until about five or six years of age, and cleanliness is much attended to.

The men are in general of an indolent habit, and disinclined to work, although they readily assist each other, willingly exerting themselves where strength is required, as in launching boats, &c. and when public duties are to be performed, they are carried through with spirit, at least on King's Island. At this place the inhabitants pay no taxes, that is, they are exempt from contributions exacted from the rest of the Sultan's subjects. They, therefore, do not feel any obligation to work beyond providing for the demands of nature, and this they acquire by becoming dependents of any of the chiefs, most of whom retain as many followers as they may be able to support, a large retinue being considered a sign of rank and power.

The laboring classes, exclusive of those engaged in pursuits connected with trade, follow various employments, from which they draw the means of subsistence; the most common of these are, fishing, gathering cocoanuts, drawing toddy, weaving cloth, and collecting the small cowries. The domestic duties are mostly attended to by the women. They also beat out the fibres of the cocoanut husk, after it has been soaked, separate the thick from the thin, and twist them with the fingers into yarn; make mats, prepare the bread-fruit for keeping, by slicing and drying it in the sun,\* extract oil from the nuts, spin cotton, and dye thread for the loom; make sweetmeats of minced cocoanut, jaggery and sugar-candy, and wait on the men at their meals. Both sexes appear to derive much enjoyment from a habit of walking about in the open air in the moonlight, in which all classes indulge till a late hour. They seldom, during the period of the full moon, go to bed before 2 or 3 o'clock in the morning, and then rarely rise again before noon. They have three meals a day; one shortly after rising, another about six hours later, and the third just before retiring to rest.

The principal articles of food are the following, rice, fish, (the Bonito most commonly used dried,)\* bread-fruit prepared in various ways, but most palatable when sliced thin, and fried crisp, though in any form it is not accounted wholesome, probably from the fruit being plucked immature, cocoanuts, jaggery, and occasionally a few fruits and vegetables. All these are produced on the island, except the rice, which is brought from abroad. This forms the largest constituent of every meal, being considered necessary for the preservation of health, and is generally dressed mixed with grated cocoanut. A few articles, such as tea, coffee, sugar, &c. are imported from the Coast, for those who can afford such luxuries. Oil is sometimes used in cookery, when variety is desired, but the preparations in which it enters, though relished by the natives, are very unsavoury to the palate of a stranger. There are a few sheep and cows on King's Island, some of which are slaughtered on festivals, and occasionally for the Sultan's kitchen. The head people object to private individuals possessing any, alleging that the fruit trees, which overtop the enclosures, would soon be destroyed by them. Their loyalty, however, or perhaps some less elevated feeling, will not allow them to demur to such damage when caused by the Sultan's cattle. The custom of chewing betel-nut, with its usual accompaniments of betel-leaf, chunam, kaat,\* and tobacco, is common amongst all classes.

The use of fire arms is only just being acquired amongst the Maldivians. To be able to shoot with a musket, is considered no mean accomplishment; the dignity of the Fandiarhee even not being lessened by his employing hours daily in killing crows! The principal men are very anxious to learn the use of the great gun. The few old rusty cannon on the island are, however, hardly available for practice, and powder and shot are scarce.

On festivals, feats of strength and skill are exhibited, under rules and restrictions to prevent injury, or danger, to the performers. Wrestling, which formed part of these games, was lately prohibited, as some of the parties were injured by the falls they got. The weapons employed in these exercises are swords, spears, and the quarter-staff, to teach the use of which, and prepare the several actors, there are masters appointed by the Sultan. It is not deemed beneath the dignity of the principal men to take part in these games. We, on one occasion saw an officer of high rank, the Hindeggeree, or Public Treasurer, amongst the players at quarter-staff; and we were told that the former Sultan not unfrequently entered the lists with his subjects.

There is a barbarous religious observance practised, which, however, is reprobated by the head men, though they, and even the Sultan, generally attend to witness it. The company being assembled, the performers step forth singly, and lacerate their bodies in various ways, by cutting themselves with knives, or passing spears, or iron bars, through their flesh. A Chittagong trader, who had been invited to witness these performances, stated to us the next day, that he was so shocked at what he saw, that he could not wait the conclusion. Some of the actors thrust an iron bar of the thickness of a man's finger, through the fleshy part of the cheeks, passing it in from one side of the face, and drawing it out at the other. Others cut themselves all over the arms, back, and head, with knives. Having been informed that the Emir-el-Bahr had presided, Mr. Christopher went to his house, and was shown the various instruments used at these revolting rites. Amongst them was a spear (the largest) with a blade 5 inches broad, and a staff 3 inches in diameter, and 12 feet long. The Emir informed him that this ponderous instrument was for the purpose of being passed through the thigh. To effect this, an incision, he said, was first made with a knife, and the operator, with the assistance of one of his pupils, holding the spear, (it being too heavy for the former to sustain the whole weight in such a situation,) steadily passed it through, while an assistant or two raised the flesh to dilate the incision. The master professes to be able, by the power of charms, to check any hæmorrhage, but acknowledges that no

charms will avail to prevent a moderate issue of blood. Although this is a rite of Pagan or Hindoo origin, the people believe that the Koran commands such performances by true Musalmans, and it is very common for men to be hired, as jugglers are, to exhibit to strangers.

Like all Mahomedans, the Maldivians bury their dead, the body being attended to the grave by the relations and friends of the deceased. During our stay at Malé, the grandmother of the Sultan died. The body was conveyed to the mosque, where prayers were read over it. The men who carried her coffin walked on cowries, which (to the value of 100 rupees) were strewn on the road from the house. As the procession moved on, handfuls of the small copper coin (fifty of which go to a rupee) were scattered, for which the lower orders of the people in the train kept up a scramble, very much out of character with the occasion, and ill according with the rest of the scene. All the men were attired in full costume, consisting of a red waist cloth with black and white borders, and a head-piece corresponding to it, both of native manufacture. At the burial a gaudy canopy of cloth of various colors, supported on four poles, was elevated over the body, and the Fatha was read. After a temporary hut had been erected over the grave for the readers of the Koran, the company adjourned to the Sultan's palace, to partake of a dinner prepared for them. It is customary for the relatives, and those who wish to show their respect for the memory of the departed, to hire people to read the Koran, and sing portions from it day and night. They are careful in erecting tombstones over their lost relatives, to preserve the date of their death, the anniversary of which is observed by alms-giving and prayer, on the part of the surviving members of the family. When passing the grave of a near relation, it is customary to pause awhile, and repeat the Fatha. This is also done at tombs erected over holy men, or reputed saints, if the passenger has time, otherwise a salaam is made. The graves of the Sultans have each a building erected over them, all of the same form, about 10 feet long, 7 broad, and 10 high, with a peaked roof, the sides being built of coral-stone, covered with ornamental carving, except where at intervals a smooth surface has been left, for Arabic sentences. Over the entrance is hung a cloth marked with a few words written in large characters. A remarkable object on the island is a tomb erected over the remains of a person, who is regarded by the natives as the most eminent of their saints. The building, which is surmounted by a cupola and a short spire, is 30 feet high; the gate, over which a lantern is placed, is of copper net work. There are several

mosque in the town; also a tower 40 feet high, from which the crier calls the faithful to prayer at the appointed hours.

Crimes of a heinous character are scarcely heard of on these islands, and even theft and personal violence are of rare occurrence, from the severity of the punishment which they would draw down on the offender. One of the worst features in the character of the natives is their sensuality, which may be observed in their intrigues, and shews itself in the topics they are so prone to introduce in their ordinary conversation, a habit which is not reprobated by any class: The law for checking the extension and indulgence of this passion, is exceedingly severe, but its wisdom appears more unquestionable than its efficacy. The obscene expressions, so commonly employed in India, are not in use amongst these islanders. \* They, however, when they quarrel, generally taunt each other by casting reflections on the legitimacy of the birth of the individual addressed: thus they say, your "father is doubtful," &c.

During the early part of our residence, we did indeed hear of certain transactions, which, if true, would have stamped with deceit and treachery, the character of these islanders, but subsequent observation induced us to attach little credit to the reports in question. We allude to certain reports of the crews of wrecked vessels alleged to have suffered inhumane treatment at the hands of the natives; but the statements of those individuals who were said to have witnessed the facts when questioned by us, marked as they were by consistency and with every appearance of truth, greatly strengthened our suspicion of the incorrectness of the accounts which had reached us. It is true the natives generally showed much reserve and unwillingness to converse on the subject of the reports in question, but the same feelings were also manifested in regard to particulars connected with the present state of the islands, and to passing, as well as past, events. It is not all improbable that traders visiting Malé, hearing some accounts of shipwrecks, or seeing in the possession of the natives articles which not being usually imported, could only have been acquired from vessels driven amongst the islands, observing also the backwardness of the natives to answer inquiries respecting those matters, and attributing this to a desire to conceal the facts, though they are equally incommunicative on every subject relating to the affairs of the islands, it is, we think, not unlikely that under such circumstances, the traders would, out of such questionable materials conjure up tales of murder and bloodshed, which had no foundation in fact. We ourselves were at first inclined to credit some of the reports of this nature which we heard, and Lieutenant Young con-

sidered it his duty to address the Superintendent of the Indian Navy, to make known to him what we had heard respecting one particular case, in which a vessel driven on shore on Malé, was stated to have been plundered by the natives, who, it was alleged, murdered the crew, and found much treasure on board. We were led to doubt the truth of the statement, from a conversation we had with a native of Chittagong, who had been thirty-five years an exile in the Suadiva Attol, whither he had been banished for having purchased stolen goods. On the accession of the present Sultan, he, with many others, was released from the operation of his sentence, and permitted to return. When the abovementioned wreck occurred, he was resident trader at Malé, and some of the particulars relating to it he had from the native portion of the crew. The vessel, he stated, was a merchantman of large size from Surat, bound to the Mauritius, having on board specie, being the plunder obtained by the Frenchmen on board, during a privateering cruise. When she was wrecked, the French officers and men were in a sickly state. During their stay at Malé, they were occupied in getting the dollars from the vessel's hold, into which it appears the rock had worked, and when they had got out all they could, they were provided with a passage to the continent. One of them, however, remained behind from choice. He turned Musulman, married on the island, and died in 1831, leaving an only daughter who is now married. Many dollars, it appears, were found after the departure of the French, who gave up the search owing chiefly to the difficulty of getting at them, and the sickness amongst their party. As our informant, who stood a close cross-examination, was consistent in his account, and had apparently no motive for deceiving us, or concealing the truth, his statement appears more entitled to credit than the other version of the story, resting, as it does, merely on vague reports.

As to the reserve observed by the natives, it seemed to us to be the effect of a vague feeling of apprehension, lest information given to foreigners might be used to their disadvantage. The Viziers having never left the islands, their views are, of course, very narrow, and, in their ignorance of every thing beyond their own "little world," the small amount of treasure possessed by the Government, might appear to their eyes a great temptation to the English to gain possession of the island, an event which, it is believed, has been predicted in some old tradition. The head men towards the latter part of our stay became very communicative, but it would have been imprudent for us, even then, to appear too inquisitive, and we were careful not to touch upon any subject likely to excite their suspi-

cion. When this feeling was lulled, our intercourse with them became very agreeable; points in their character were developed, which it gave us much pleasure to observe, and a decided improvement took place, not only in their conduct towards us, but also in that of the islanders in general.

Of the character and disposition of the natives we were impressed on the whole, with rather a favorable opinion. They are a quiet, peaceable race, hospitable and kind to strangers, though suspicious and distrustful of them. Unacquainted, indeed, with the practice of the higher virtues, but equally unfamiliar with vice in its darker forms; with desires and wants circumscribed and limited, and the means of satisfying them attainable without much labor, they have little incentive to increased exertion, for the purpose of augmenting their productions; and hence, in all probability, the little attention paid to the improvement of their resources, and the absence of all care regarding the amelioration of their condition. The apathy and indifference evinced by them on these subjects seem, however, to result in a great measure, from a feeling of contentment, though of a spurious kind.

Towards each other the natives are kind and friendly, and to their own kindred very affectionate, of which we saw many pleasing instances in their attendance upon the sick. Humanity and charity are virtues in great esteem, but in relieving the wants of their fellow creatures, they do so with ostentation.

The installation of the present Sultan took place before our landing. We were, however, at Malé when the umbrella was elevated over a younger brother of the Sultan, a ceremony which betokens eligibility for future sovereignty, and is performed to mark the line of succession. On this occasion there were great rejoicings in the town. Guns were fired, and the public were entertained in the evening with games, at the conclusion of which they were treated to a grand feast. On this day the young prince was for the first time seen in public. The ceremony partakes of a religious character, inasmuch as the heir-apparent is required to proceed in procession to the mosque, and to the tombs of the principal saints, to repeat the Fatha. The umbrella being one of the insignia of sovereignty, none but the Sultan can have it carried over him. On one occasion Hamed Diddee, when on a fishing excursion, having had an awning spread over his boat, caused not a little dissatisfaction amongst the natives, who are exceedingly jealous of the Sultan's dignity, but he seemed to disregard their murmurs, and remarked that there was nothing disrespectful towards his sovereign in what he had done. On

another occasion, one of us having an umbrella, invited a Visitor to come under its shade, but he declined the offer.

During our residence, the Sultan was never seen abroad except on public occasions, when he was attended by a body-guard of about 20 men, and every means was resorted to, in order to produce an impression of state and dignity. On Fridays when he proceeded to the mosque, a loud blast of a trumpet announced his leaving the palace for that purpose. His habiliments were always suitable to his rank, according to the fashion and notions prevailing in the East. But he wore no jewels on his person. The customs and etiquette observed in the Durbar, are remarkable for their simplicity. The courtiers and officers take their stations according to their respective ranks. No salutation is expected. All persons, subjects, are however required to wear dresses of native manufacture, when they come into the Sultan's presence.

The climate of the Maldivas as regards the feeling, is neither oppressive nor disagreeable. It cannot, however, be said to be salubrious, judging from its influence on the natives, as well as on our party at Malé, and on the officers and crew of the vessels during the survey. The latter suffered mostly from two diseases; the Beri-beri which attacked the Indians only, and generally proved fatal, and inflammation of the bowels, to which both natives and Europeans were very subject. No case of ague occurred in the ship, but, during our residence on shore, this disease manifested itself amongst us, and not an individual of the party escaped. Amongst the islanders the prevalence of intermittent fever was the only distinguishable effect of the climate upon them. They described the malady as difficult to be got rid of, and that those whom it attacked generally suffered for years from its periodical visitations; the duration of each attack being in some cases only a few days, and in others a month. Few remedies are resorted to by the natives in such cases; an infusion of grounded pepper is given as a drink, and fires are placed under the patient's bed during the cold fit, but dependence is chiefly placed in a full and nourishing diet, which is invariably prescribed; spices being also occasionally used as stimulants, even when the fever is accompanied with violent pains in the stomach. These pains are most severe during the cold fit. There are no other bodily ailments to which the inhabitants are peculiarly subject, except the cutaneous eruption, the very name of which is banished from polite European society. It is very common, as are coughs, &c. the usual concomitants of a humid atmosphere. The natives pretend to no skill in medicine. Some spicery, the simple purgatives ordinarily used in



India, and a few vegetable compounds used (and generally with much success) as poultices, comprise their Pharmacopia. Grey heads are not uncommon, and the aged did not appear in general emaciated. From the information which we collected, 70 years is not considered unusual. The young men are, in general, robust and well formed, though neither remarkably long nor muscular. There is said to be a greater than the usual mortality amongst children, and many persons who had families, lamented that comparatively few children attained maturity, the number being in general not more than one in four or five.

The weather during the N. E. monsoon is very mild, and the air, cooled by occasional showers, is then very pleasant. The S. W. monsoon, however, is exceedingly violent, and attended with much rain, which often pours incessantly for days together.

The average range of the thermometer is from 80° to 84° during December, the coldest season; in April, from 85° to 90° in the day, and generally 80° in the night. The winds moderate the solar heat, and prevent its being so oppressive as might be supposed from the height of the thermometer.

The different written characters found on tombstones on the Maldiva islands, are of three kinds. The most ancient are called by the natives Dewehi Hakura, which in all likelihood were used by the first inhabitants, but now the knowledge of them is nearly lost, being confined to a few individuals. In the Southern Atolls, a knowledge of this writing appears to have been retained longest, for it is not remembered in the Northern ones at all, whereas orders are now written at Malé in this character, for the inhabitants of the South Atolls. No old manuscripts with this character are preserved. One peculiarity in the alphabet is, that some of the consonants change their form according to the various vowel-sounds with which they are united, the construction of the letter being altogether different. This character is written from the left hand.

The next is the Arabic, which is written in two different ways, the old and new; but the old method of forming the letters is now discontinued. From the appearance of the tombstones, it is evident that the Dewehi character was in use prior to this, for the freshest inscription in that character bore more signs of age, than any we have seen in the Arabic. The multitude of inscriptions in the latter character, is an evidence that it was very extensively spread and known throughout the islands. Both of these characters were invariably carved in relief. The modern Arabic character was apparently introduced about the same time as the present native writing.

The modern alphabet contains eighteen letters; and is called by the natives Gabali-Tana. There are some auxiliary letters in it, derived from the Arabic and Persian, in common use, but not included in the alphabet. It is written from the right hand, and was introduced when the Portuguese garrison were overcome, and Mahomedanism re-established by a chief and men from the Northern Atolls, and is now used throughout the islands. The language spoken is substantially the same in all the Atolls, though the Southern ones have a dialect of their own; and as they possessed a knowledge of the ancient writing longest, it is very probable that their dialect will have the most resemblance to the language of the Aborigines, for, in consequence of the intercourse with Bengal and other parts, the language now spoken at Malé, is intermixed with many foreign words.

There are several kinds of Tana writing; and we are inclined to think that the one at present used, was not so generally adopted until within the last fifty years, as many tombstones are evidently inscribed in a character differing from the Gabali-Tana: the letters at least have a different sound, and the signs used for vowels are different.

Letters of the alphabet are used as numerals, and they reckon by twelves, as we do by tens.

The possessor of the Atolls is a hereditary prince designated Sultan, who is an absolute monarch, though governing by laws, partly derived from the Koran, but principally from established custom. Acting under his authority are various officers, to whom are assigned specific duties, and the superintendence of particular departments of public affairs. Six are appointed Viziers, or Councillors, to the Sultan. He very frequently consults with them, a custom which tends much to cherish a reciprocal confidence. Although the Viziers have the privilege of offering advice, they possess no authority to control the Sultan, but the influence which they acquire from their situations, often enables them, indirectly, to restrain him from arbitrary exertion of power, or from adopting measures injurious to the public interests, by exciting the people to remonstrate in a body. An instance of such a course having been adopted with success, was related to us. It occurred during the late Sultan's reign. Towards the close of his life he felt a desire to visit Mecca, but his own finances being insufficient to meet the necessary expenses, he sent an order to the Hindeggeree, or public treasurer, to supply the deficiency. The Viziers, it seems, did not much approve of the contemplated pilgrimage, and less so of the intended drain on the public funds, but still they would not venture themselves openly to oppose

either measure. They, however, instigated the populace to proceed to the Hindeggeree, and to protest against such an appropriation of the public money, which had the effect of preventing the accomplishment of the Sultan's design. Another check against unjust and tyrannical proceedings on his part, is the example furnished by the fate (the tradition of which is familiar amongst the people) of a late Sultan, who was put to death by his subjects, whose feelings he had excited by treating their religious observances with derision, and a venerated Fandiarhee with contempt.

The privilege of extending clemency to offenders belongs exclusively to the Sultan, though it is seldom exercised without the counsel and advice of the Viziers, whether a free pardon be granted or not, or the sentence only mitigated, and whether leniency be shown in consideration of extenuating circumstances, or, as is often the case, out of regard to the rank, family, &c. of the offender.

The next in authority to the Sultan, and who shares with him in the respect and veneration of the people, is the Fandiarhee, in whom are united the two offices of head of the church, and chief magistrate. The reverence with which he is regarded, indicates the sincerity of the islanders in their belief of the Mahomedan tenets. His decisions, as magistrate, are always received with deference, and the natives in general shew, that they entertain a high sense of the importance of his duties, particularly that of interpreter of the Koran, he being the only person amongst them who has a competent knowledge of the Arabic, for a purpose considered so necessary. Under him, in his sacerdotal capacity, are Naibs, or deputies, called also Katibu, who if not employed in other Attols, lead the worship in the mosques on King's Island, where six or seven usually reside. They are considered as pupils of the Fandiarhee, and from among their number, when he dies, a successor is chosen, the appointment being almost always bestowed on the individual considered by the former incumbent, as most worthy of it. The Naibs are usually employed in transcribing passages from the Koran, relating chiefly to observances and ceremonies, with an explanation in the Maldivian language, for distribution in the different Attols. They are also referred to, both by individuals and by the public authorities, when any affair of moment is in contemplation, to declare auspicious days for such undertakings.

Next in order to the Naibs are the Muddins, of whom there are several, one being attached to each mosque to see it kept in order, and to lead the prayers in the absence of a superior. It is also his duty to proclaim aloud the time for the performance of worship; and

under his charge are the tombs of the several saints, who repose in the graveyard. He must see that lamps are kept constantly burning at night, and the sand before the doors kept smooth and clean.

On all islands where there are 40 male inhabitants, a Katibu is stationed to read in religious exercises and ceremonies, and to settle disputes. Marriages are solemnized and contracted before him. Not being in receipt of any allowances from the Government, he is supported by the islanders, and is a principal man among them.

The Viziers were formerly called Muskull, signifying elder, which title is now obsolete, that of Wazeerhee being at present used. There are, as before stated, six Viziers, who form the King's Council, and are executive magistrates in the different quarters of the town where they respectively reside, exercising authority also over all the soldiers belonging to their respective quarters. When an offender has been found guilty by the Fandiarhee, it is the duty of the Vizier, to whose quarter he belongs, to see the sentence enforced. The Viziers superintend public works and undertakings, such as building up the wall that protects the boats from the swell, and, in fact, the execution of all orders issued by the Sultan. They are appointed by the Sultan, and are removable at pleasure. On their installation, they receive from the Sultan a staff of office, which they carry when attending on his person, on public occasions, and in his processions to the mosque, &c. The nomination is proclaimed in all the streets of Malé, by the public crier, who blows a trumpet to attract attention. We were informed that an oath of allegiance was administered to them and other public officers. The Vizier first in rank, who is styled Durimind, is Chief or General of the army. The second called Hakura, has no distinct duty, and the third who has the supervision of all maritime affairs, is called Wilono Shadander. The remaining three Viziers, viz. the fourth, Famederi; fifth, Mafae; and sixth, Dahara, have no particular duties assigned to them.

The Hindeggeree, who is public treasurer and accountant, collects the revenue of the different Attols, which is paid in produce, goods, &c. These he sends in the Government boats, on account of the Government, to Bengal, and to the different trading ports.

The emoluments of the Nakodas of those boats, are derived from the privilege allowed them of carrying on trade on their own account. The Hindeggeree is vested with authority to enforce the payment of revenue when a complaint is made to him by the Attol-wari, or, if no representation is forwarded, the Attol-wari is called upon by him to explain the cause of default in the transmission of the established dues. The present Hindeggeree is considered of

equal rank with the Viziers, and possesses considerable influence in the community: under him are accountants of revenue and trade, with clerks to assist in these duties.

The 'Emir-el-Bahr,' an Arabic title, which signifies Chief of the Sea, is a kind of Master-attendant of Malè. He visits the vessels that arrive, and distributes the duty levied on merchandize. He is very useful to all strangers by attending to their wants, and affording them assistance, which he is required to do by authority.

The Attol-wari is a governor, or chief of a division of islands called an Attol. He has not the power of punishing offenders, except in trivial cases. If the crime be of a serious nature, the culprit is sent to Malè to be tried. It is his duty to collect the revenue of the Attol, and to transmit it to the Hindeggeree. What the emoluments of this office are could not be ascertained, but it is held by men of the first rank, relations of the Sultan, and is in the gift of the Hindeggeree. Sons of the Viziers often hold the appointment.

The Rarhu-wari, or head man of an island, stands in the same relation to the Attol-wari, as the latter does to the Hindeggeree, in respect to the revenues. He possesses authority of a magisterial nature, to suppress disturbances, and confine the unruly; and he is the public officer who must be witness to all marriage contracts entered into on his island.

The Viziers are annually supplied with red cloth, and a sum of money, in the copper currency of the island, to be distributed amongst the soldiers resident in their respective quarters of the town. All concerned are assembled at the palace, and each Vizier as he receives the cloth for his party, has it carried to his quarters, whither he himself proceeds soon after, followed by the soldiers under his charge and superintends the distribution. Each man receives one piece of cloth, and thirty pice. Each Vizier has under his charge nearly 100 soldiers, in all about 550 men. The soldiers bear no arms, and, as may be supposed, are under no sort of discipline beyond that which results from the habit of assembling, without much order or arrangement, when called together, and attending to the requisitions of the Vizier for their services. They are, however, available for all kinds of duties, and so anomalous are these that the men are even liable to be sent, on an emergency, on board the public boats as sailors.

On historical points very little information could be gleaned by us, owing to the unwillingness of the islanders to converse on such subjects, apparently from the suspicion and jealousy with which our

residence amongst them was for sometime regarded by the principal people. From what we could gather, it would seem that the constitution of society, and the form of government, have been essentially the same for a long time past; at least since the introduction of the Mahomedan religion. We were told that a Sultan, who reigned about one hundred years ago, rendered himself obnoxious to the people by ridiculing their religion.

He, however, undertook a voyage to the Red Sea on a pilgrimage to Mecca, and during his absence, a nobleman, named Faruna Kulegefana, who was a leader of the popular party, and had gained great influence, determined with others, to prevent the resumption of the Sultanship by the absent prince, by putting him to death if he should return. Return he did; but before he could land, the plot against his life was carried into execution. Some of the conspirators, without divulging their purpose, pushed off in a boat, under pretence of bringing the Sultan on shore. He entered their boat, and while returning, they bound his hands and feet, and fastening stones to his feet, threw him overboard. On landing they announced the accomplishment of their purpose, and being now joined by the rest of their party, proclaimed their leader, Faruna, successor to the murdered prince, by the name of Sultan Mahomed Nooradeen. On his elevation he banished to Suadiva Atoll the son of the man whose place he filled, but after a few months he himself was obliged to quit the station to which he had waded through crime, and to abdicate in favor of a prince of the royal blood, in consequence of the people not wishing to have on the throne one who was not descended from the family which had so long commanded their homage and allegiance. The son of the Sultan, who was murdered by drowning, and his offspring lived nearly independent in the Southern Atolls, until the year 1831. Some of his descendents are still alive, and are permitted to visit Malé.

The prince, in whose person the restoration took place, was named Hussain Nooradeen. He reigned until his death, when he was succeeded by his son Hussain Aezadeen, who proceeded to Mecca, and there died. This is the Sultan who is stated to have made the pilgrimage with the dollars obtained from the plunder of a wrecked vessel, but the truth of the reports which we heard on this subject is, as before remarked, very questionable.

His son, named Mahomed Minadeen, succeeded him, and after a reign of thirty-five years, died in January, 1835.

The present Sultan, who is called Mahomed Mizadeen, is about

seventeen years old. As yet he has little influence, except by the power of his uncle Hamed Diddee, who has gained the affections of the people. The prejudice and fear excited by our proposal of residing on the islands, were much diminished and quieted through him, and our residence was made much more agreeable by the openness of his conduct, and the favorable influence which his behaviour towards us had on the principal men on the island.

In observing the fasts and ceremonies of their religion, the islanders are very particular, stigmatizing, as unbelievers, those who do not join in them. To be acquainted with the times, manner, &c. of these outward observances, and to be able to repeat a few sentences of Arabic, though without any idea of the meaning of the words, constitute in general the whole of their religious knowledge; the Fandiarhee and one or two others, taught by him, being the only persons who understand what they read in that language.

They have a tradition that about 400 years ago, the Mahomedan religion was introduced amongst them by a man whose name was Tabriz, or whose country was so called. The probability is, that the latter was the case.

The tomb of this person, which is pointed out in Malé, is held in great veneration, and always kept in good repair. Sometime afterwards, Christians (doubtless the Portuguese) came there, and propagated the tenets of their faith, but they were soon expelled by one of their own chiefs\* who belonged to the Attol Zilla Dou Matee, and who re-established Mahomedanism amongst them, on a secure footing. Tabriz, they say, came from Persia; and they state that shortly after his death, some of his countrymen who came in search of him remained, and when they died, were buried on the S. E. point of the island. From the Persians the islanders learned many songs in the language of that people, which are still sung, although not understood. The tambourine, it was also said, was brought there by them. We visited the graves of the Persians, and counted about sixty, only two of which had inscriptions that were legible, and bearing date 994th year of the Hijra, which would make them 257 years old. One of these being in appearance less old than the other graves, it seemed probably that it was not the depository of the remains of any of the first settlers, but of those of one of their descendants.

\* The natives told us, in opposition to what Laval states, that the restorer of the present worship who expelled the Portuguese, came from the Northern Atolls. He is said to have introduced amongst them the written character at present in use.

The Fandiarhee has many Persian manuscripts, but only one could be procured by us.

Where the mass of the people is sunk in ignorance, as is the case here, with only a few exceptions, it is not surprising to find the most absurd and superstitious fancies exerting a powerful and pernicious influence. In describing their superstitions, it may not be irrelevant to premise that, in the absence of other and better sources of information, an account of these may throw some light on the nature of the religion of the islanders which preceded the one which they now profess. One of the most remarkable of their customs is the offering made to the sea, when a boat is to be launched. On such occasions a small vessel, three or four feet long, being decked out with flags, and having samples of the various fruits of the island, is set adrift; should it be a boat newly built, other ceremonies are observed, accompanied with feasting, music, &c. The miniature vessel is decorated with flowers, and her gunwales are hung with fruits, for which, as soon as she enters the water, there is a general scramble. Before a voyage is undertaken, an offering is made to some saint for success, and in danger or distress the mariners trust chiefly in the efficacy of vows or offerings to the tombs of some personage (dead or living) eminent for piety. We are informed of large sums given as votive offerings made during boisterous weather, to an old priest resident at Calcutta. All monies paid at Malé in fulfilment of such vows go to the priest. It is also a common practice for persons laboring under sickness, or any other sufferings, to dedicate certain sums as a means of ensuring relief. An amulet obtained from a reputed saint is prized very highly as a preventive of calamity, and those who possess such a thing constantly wear it. The person of a saint is regarded with the greatest reverence. Even the king receives such a person standing, though his doing so is considered a sign of acknowledged inferiority amongst the people. There are, according to the legends we heard, three kinds of merit which entitle a man to be esteemed as a saint, or a person favored of God.

First, eminent usefulness to the country in matters of religion, as in the case of the person who first brought the people to a knowledge of their faith; and that of the restorer of it, after the conquest by the Portuguese.

Second, special miracles wrought for the benefit, or in consequence of the prayers of such persons.

And Thirdly, severe afflictions befalling those who have been the



means of bringing on them disgrace, punishment, or other trouble, they being in such cases considered as avenged by God.

Many individuals on the island gain their livelihood by writing charms, which are supposed to possess much virtue, not only as a preventive against, but also a cure in most diseases. In order to produce the curative effect, the ink of a fresh written charm is washed off in water, and drank as a medicine.

The belief in the existence of spirits and supernatural beings, who interfere, sometimes visibly, in human affairs for purposes of evil, as also in extraordinary phenomena supposed to afford intimation of pending calamity, is universal amongst the islanders. Many positively asserted to us, that they had seen such things, and during our residence, evidently through the fear entertained of the intentions of the English, it was often reported that spirits had made their appearance, which were generally described as habited after the manner of Europeans, carrying arms, &c. and which were said to have caused death, madness, sickness, abortion, and other extraordinary effects. They believe also in the auspiciousness, or otherwise, of certain days for particular transactions, no undertaking of any importance to individuals or to the public, being entered upon without the priest being consulted to determine that point. During recitations in Arabic of passages from the Koran, which is a common practice, incense is kept burning, and when this takes place on board a boat, the crew are always careful to fumigate the rudder head and tiller before the fire is extinguished.

A remarkable instance of the extreme credulity of these people in superstitious tales, and their baneful effects, was related to us by one of the natives as follows. "A person reputed to be a saint, while on a fishing excursion, having used all his bait, was in want of a supply to continue the sport, and demanded some from a boat which he met, belonging to a populous island within three miles of Malé. Being refused, he pronounced a curse upon all the inhabitants of that island, declaring that their boats would never more catch any fish, and it is reported that for many days afterwards no fish were caught, either by the fishermen of Malé, or by those of the island in the neighbourhood. This being supposed to be the effect of the curse hanging over the islands denounced by the saint, an order was issued by the Sultan, prohibiting their ever going out fishing in their own boats, which regulation was in force when we were residing at Malé, and we were informed had been so for many years back. When it is considered that fish is the principal article of food, as

well as of commerce on these islands, and fishing the chief employment of the population, some idea may be formed of the privations and suffering endured by these unfortunate islanders, in consequence of their gross ignorance and superstition.

The Maldivans have a written, as well as an unwritten law, the former being the Mahomedan code, and the latter founded on the established customs of the country, which are well known to all the classes. The Sultan, who is not above these laws, is the fountain head of justice, but the Fandiarhee, as head of the church and chief magistrate, is the expounder and the administrator of the laws, aided by his deputies called Katibus. The Fandiarhee's jurisdiction extends over all cases, civil as well as criminal, the cognizance of offences against religion being, however, his peculiar province. He resides on King's Islands, and deposes his subordinates, either permanently, or on visiting circuits to the different Atolls. The mode of trial is equally summary and simple. On a complaint being made, the accused is cited to appear before the Fandiarhee or his deputy, or if he has been seized by the soldiers, who perform the police duties, in the commission, or upon strong suspicion of a criminal or illegal act, he is taken at once before the judge, and as soon as the witnesses can be collected, the complaint is at once investigated and disposed of. The testimony of one witness in support of an accusation, is held to be sufficient to establish its truth. When no witness can be produced by the prosecutor, the accused is required, in order to clear himself, to make oath as to his innocence; and in case of his declining that test, he is considered guilty. Should he, however, comply, and take the oath, it does not always fully exonerate him, if appearances or probability be on the side of the complainant's story: in such cases the accused is punished with a number of stripes according to circumstances. A person who has taken such an oath is prohibited by law from going in the trading boats of the islanders, lest, in case of the individual having committed perjury, the judgment of God should, on his account, come upon the vessel. Nevertheless, the inducement to a man so to forswear himself is very strong.

There are some severe regulations regarding the respect with which the wives of others are to be treated, according to which the man who offers another man's wife the leaf commonly eaten with betel-nut, is punished by flogging, the act being esteemed equal to touching her, which they consider most improper. In case of adultery, if the woman has not given encouragement, the man is severely

flogged on the back in the street, the Wuzirée of the quarter of the town, to which the offender belongs, superintending the punishment, and the injured person being the administrator. When the woman is proved to be as criminal as the man, both are punished; when the injured party is a man of high rank, he is allowed to try the offender in his own house, confronted by the witnesses, and to allot the punishment, as also to have it inflicted by one of his followers. We were told that sometimes death ensues, from the severity with which the flogging is administered, which is inflicted with two or three rattans held together in the hand. The marriage bond is not considered binding after both parties have publicly declared before the Katibu their wish to annul it. On such occasions the woman is not required to attend in person, two witnesses on her behalf being sufficient.

Theft is punished by flogging, and banishment to an Attol distant from the one to which the individual belongs. Sometime ago the punishment was more severe, and we were shown a block of stone on which the right hands of offenders were chopped off formerly for this crime. Murder is punished by flogging, and banishment to a barren, uninhabited island of the Suadiva Attol, where the individual usually dies a lingering death. Convicts who escape and return from thence, are generally put to death. An instance lately occurred, however, of the return of two men from their banishment the particulars of which were related to us by a person who had seen the individuals. When left at the islands with the horrors of starvation before them, they adopted the desperate measure, in the S. W. monsoon, of committing themselves to the waves, buoyed up by a large piece of drift wood, hoping to reach Ceylon. Driven by the wind and sea, they were providentially cast upon a part of that island, whence after some time they returned to Malé, and the Sultan learning the circumstances granted them a pardon.

Among the animals on the Maldivas are rats and tortoises. The former are very destructive to the cocoanuts. They run up the trunk, and introduce themselves into the nut, in which they remain as long as any of the kernel is left, and then quit for another. Sometimes accidents happen from nuts thus destroyed falling on persons passing by.

The tortoises are of a small kind; they live in tanks and have a very offensive smell, but the flesh is white and tender. These are found only on King's Island, where they are numerous, but are not eaten by the natives. A small kind of harmless snake is sometimes

found. The flying fox is very plentiful ; its body is about the same size as that of a crow. There is only one singing bird, a small one of a black color, called by the natives Colea. There are a few snipes, ducks, bitterns, and the usual sea birds, curlews, &c. The wild ducks come over in great numbers during November. The natives take them in nets ; they also shoot them, for they are considered excellent food.

Coral fish of every hue are numerous. The sword fish is common ; it sometimes pierces the boats, and has been known to cause small ones to founder by splitting the planks : it attains the length of eighteen feet. A small specimen which we had an opportunity of examining, was nine feet long. Turtle, sharks, and porpoises, are plentiful, from all which oil is obtained. The natives catch the largest sharks with a hook. While the fish remains within the Atoll in twenty and thirty fathoms depth of water, they pay out a long scope of line, and the shark, when unable to descend deeper, darts onward horizontally, dragging the boat after him ; but if a large fish is hooked, and it dashes outside of the islands into deep water, they immediately cut the line asunder, for fear of accidents. They commonly take turtle while it is floating at the surface, and also when it lands. The bonito is caught in the following manner. A great many men go out in one boat, each supplied with hook and line. A number of small flies for bait are kept alive in a compartment built in the boats for this purpose. When a shoal of the bonito is described, they make for it quietly, and, on coming among the fish, throw part of the bait overboard ; the bonito dart in, and snap them up with the greatest eagerness : when any are swarming round the boat they are caught with the hooks. The quantity thus taken in a day by one boat, sometimes amounts to a thousand. Six or seven hundred is the ordinary number. The islands have long been famed for this fishery. One bonito is divided into four pieces, parboiled and dried, for home consumption, or exportation. We set up a model of a fishing net, of the kind used on the banks of the river at Cochin, and showed the use of it to the Viziers, but they said it was not adapted to their fisheries, as the deep water surrounding their islands was too clear.

The other natural productions of the islands are all well known on the continent. These consist of cocoanuts, bread fruit, limes, plantains, papaws, pumpkins, and the fruit of the screwpine. The cocoanuts of the Maldivas are esteemed superior to those of the continent. They are smaller, but sweeter, and appear to possess a larger,

proportion of oil ; they keep a longer time, and, owing to this quality, they are much in demand in India, for the supply of inland countries. The cocoanut is extensively planted, but it also grows spontaneously on the islands. We frequently saw nuts lying above ground (apparently where they had fallen by "chance") fixed by the roots which had issued out of them, and the stem crowned with young leaves, which had shot forth above. Last season about sixteen native boats, laden principally with cocoanuts, coir, and other bulky articles, sailed for Bengal. We suggested to the natives that they should extract the oil from the nuts by means of mills, as it would be a more valuable article of export ; and we offered, with their assistance, to construct and put up a mill, (a plan of which we had with us,) as also to explain to them the mode of using it. But they did not appear to feel any interest in the subject, although they confessed that great numbers of cocoanuts remained unused amongst the islands every year, being either left where they fell to increase their kind, or by their decay to enrich the soil.

The island produces also in small quantities, millet, and a bulb in shape and appearance much resembling an ordinary potatoe, but having a pungent flavor. This the natives grate down, and steep in water for some time to deprive it of the unpleasant taste, and dry it afterwards, when it looks very much like flour, and is very palatable. Sweet potatoes are cultivated, as also pine-apples, sugar-cane pomegranates, small almonds, a small sized astringent fruit (which has a stone), chillies, and a few arica palm-trees. The nuts of these we were informed, never come to perfection here, and are consequently masticated in a green state. The castor-oil plant is very common, and appears to be indigenous, but the seed is not collected either for domestic use, or exportation. Rice will not thrive, as it requires more labor and attention than the natives will bestow on it, though the soil appears congenial. The supply of this article is therefore imported. Cotton is grown in small quantities at one of the islands, Zilla-da-Malé. Some sugar is made from toddy.

The banyan is the largest tree on the islands, growing to a greater height than the palms. There is a species of forest tree, which, if the timber were good, would be of great use to the natives, it having a tall straight trunk. It is, however, not calculated for boat-building, and is only used for the frame-work of houses, and in works where it is not much exposed to the weather, which soon causes it to decay. Their boats, except those of the largest sort, are planked with the wood of the cocoanut tree, and are made very heavy

the planking of a boat of ten ton being two inches thick. The large trading boats are generally built of teak brought from the continent.

The ground near many villages is covered also with numbers of cocoanut husks, from which, with a little labor, a great quantity of coir might be obtained; but such is the apathy and indolence of the natives, that they scarcely seem disposed to avail themselves of this advantage. Could they be induced to make the most of it, the coir that might be produced, would form a valuable article of trade: for that purpose, however, some external stimulus would appear to be requisite, for at present they seldom think of making any exertion beyond providing the portion of produce exacted from each individual, as revenue.

The principal manufactures, and the only ones in which the natives have attained any degree of skill, are those of mats and cloth. The former are made only at Suadiva Attol, but not in great quantity. The cloth is made in Malus-ma-Attol principally, although individuals of other islands sometimes make it for their own use.

The peculiarity in this article consists in the uniformity of the coloring of the waist and head cloths, which are very becoming, being chiefly of a red color, with alternate black and white stripes, each having also a neat fringe. The dyes are very excellent, particularly the red, which is extracted from a root called "Ahi;"\* the black dye is made from burnt cocoanut husks. The value of the cloth varies according to the texture and breadth of the piece. The price of waist cloths of native manufacture, is much higher than that of the various colored ones imported from the continent, in consequence of all persons being expected, on public occasions, to wear one of the former, which causes them to be in great demand.

The art of working in metals is very imperfectly understood, and whatever is done in this line is unskilfully executed. The only artisans who work in gold and silver, live on the two islands of Nelandi Attol, (Ribada and Huludile,) whence they make their rounds periodically to the other Attols, taking their tools, &c. with them, and remaining at each place as long as they find employment, which consists chiefly in making up trinkets for the women. Other artisans, in like manner, visit occasionally the Attols, where there are no workmen in the same line.

The bellows used in these islands is a curious instrument, con-

\* 'A1 in Hindustani (Morinda Citrifolia.)

structed on principles, the application of which to practical purpose, one would hardly expect to find in an article of common use, amongst people so little advanced beyond the uncivilized state.

The boats of the islanders under 70 tons are very fair sailers, with a fine entrance, and good bearings: the smaller fishing boats, in particular, have superior swift sailing qualities. The boats have but one mast, and the sail is square, made of matted work: small sails of cloth are occasionally set on a temporary light mast, or hoisted on a shifting backstay taken to the taffrail. In going from island to island, within the Attols, the natives use rafts. Favorite boats are often painted with much neatness.

But the art in which they have arrived at the highest perfection is that of carving on stone, as we observed on the walls of mosques, and in the grave yards. It should be observed, however, that the stone being coral and soft, is, of course, well adapted for fine work. The natives spin a large quantity of cotton, which is principally imported from foreign parts: the spinning machine is simply a large and small wheel of light frame work.

The branch coral and shells make good lime, which is put on boats' bottoms, used in building, &c.

The whole of the export and import trade of the group of islands composing the Maldivas, carried on in foreign bottoms, is conducted at Malé, whither the produce of all the other Attols is brought, the dealers from each carrying back in return the produce of other parts, to supply the wants of their respective islands.

The external trade from Malé consists of two branches, one carried on by traders resorting to that place from Chittagong, Point-de-Galle, the Malabar Coast, and occasionally from Muscat; and the other by the natives themselves, in their own vessels. From the information we were able to collect respecting the first, it appears that Muscat vessels do not often visit this place: when they do, they generally bring a cargo of slaves. Five years ago one came and sold about twenty-five lads, at an average price of about 80 Rupees each. The traders from Chittagong, the Malabar Coast, &c. call regularly, arriving about March, and leaving with the S. W. monsoon, about July. This year the fleet consisted of small brigs, eight in number, exceeding a hundred tons.

They barter principally for the "goomul-match," or bonito, twelve lacs of which have been shipped off this season, being much less, as our informant Mr. H. Sartorius told us, than used to be exported ten years ago. He has known seventy-six lacs to have been

taken in one season. Point-de-Galle and Sumatra are the places where the demand is greatest. The Nakodah of one of the Galle boats informed us, that the interior of Ceylon, where a very large quantity of it is consumed, is supplied from Galle. Sumatra, however, requires the most, and is supplied by the Chittagong traders who dispose of their fish in exchange for pepper, which they carry to Bengal, generally making a profit of about three or four hundred per cent. on the speculation. They likewise carry some of the fish to Bengal; but not more than ten or fifteen thousand can be sold there in one season.

Tortoise-shell, coir-yarn, cowries, and a kind of sweetmeat, compose the other articles of export from this place.

The tortoise-shell is considered of good quality. Ceylon and Bengal are the markets for it. The thick pieces, of a deep black and yellow intermixed, are the best for the Galle market, while the spotted ones are most marketable at Bengal. Sometimes the turtle is found with its shell formed of a single piece, instead of being, as they generally are, composed of thirteen pieces. Such shells are of very high value. A Nakodah going to Galle paid thirty rupees for one seer, or two ruttals, picked from a quantity collected by a Bengal trader. About five maunds (Bengal) of tortoise-shell were procured and exported by the traders this season.

The coir-yarn of this place sells higher than the ready made rope of the continent, it being much finer, and of a higher color. The trade in this article is principally carried on in their own boats, it being too bulky for the small vessels resorting to this place. Sometimes coir is required for the use of these vessels, and then the natives barter it for dates, weight for weight, which is one rate of barter well known. The estimated price of coir-yarn is eighteen rupees for a candy, or 500 lbs. It is, however, more generally bartered as abovementioned, the cost then being about three rupees a maund, or 82 lbs. We heard that it sold at Calcutta at the rate of seven rupees per maund.

Mats are sometimes exported in the native boats from Malé, but they seldom make good the price expected, and are often brought back, in hopes of a better market another season. The trade in the products enumerated above, is carried on principally by means of barter, which circumstance rendered it extremely difficult to obtain precise information in respect to prices; but the articles brought here for barter are, rice, dates, salt, leaf-tobacco, betel-nut, coarse white cloth, cotton, red cotton handkerchiefs striped with white into



squares, curry-stuff, China ware, Indian pottery for domestic purposes, coarse brown sugar, which is preferred by the natives to sugar-candy, and brings a better price. Besides which are imported, in small quantities, steel, brass wire, thread, ghee, and waist cloths of various colors.

The port-charges and duties are moderate, and levied in a very simple mode. The vessels which have for the last few years traded here, were all small brigs. A port-due of rupees 40 is payable by every trading vessel, without reference to the period of her stay. Besides this, a duty is charged under the name of "Hadia," or presents to the Sultan and officers of Government. From a large ship one candy weight of merchandize is exacted, in addition to what is demanded for a small brig. The traders do not, however, take advantage of this custom, because they say a large ship would not be able to barter her cargo within the season, and that consequently her profits would scarcely cover the expenses of such delay. The "Hadia," is distributed as follows. To the Sultan, one candy and one hundred and thirty-three bamboos of rice, equal to five bags and a half, and seven red handkerchiefs, which are carried to his house at seven different periods. After the handkerchiefs are thus delivered, one is returned to the lascars who carried them, to which is added a quantity of betel-nuts : to the officers of the Government, the Sultan's relatives &c. according to a list which is provided by the Hindeggeree, eleven candies and fifty-three bamboos, making a total of fifty bags of rice.

The above presents may be made either in rice, salt, cummin seed, chillies, coriander seed, which are taken by measure ; or in dates, catechu, turmeric, and onions, which are taken by weight : six galls, or one and half pound, of the latter being considered equal to six bamboos, or twelve seers of the former.

The Emir-el-Bahr is the officer, whose duty it is to superintend the division and distribution of the presents : for his trouble he is entitled to a sixth part of every thing given, which constitutes the principal emolument of his office.

The presents are sent, in small quantities, on wooden platters, carried by the lascars, who are required to sing as they go to the different houses. The traders can so arrange, as to select for presents the articles in least demand in the market. This privilege, and the inferior quality of the articles, render the duties very light. Besides the presents abovementioned, forty cotton handkerchiefs are required to be given when they are delivered, the cheapest of any color being taken without objection.

There is another exaction of a different nature, to which traders are subject, according to the established custom of the place. They are liable on a requisition to supply the public stores with a certain quantity of rice, at a price fixed by the Hindeggeree, which is about half the market value. The trader is always paid for such rice in kotas of cowries, a kota consisting of 12,000, and valued at two rupees each, though they can be purchased in the bazar for one rupee. But this is made up for by the charges for godown rent and anchorage, being received by the Hindeggeree in kotas at his own valuation. If this be not attended to, and the charges be paid in cash by the trader, he sustains considerable loss. There is a small present of five rupees in a handkerchief, required to be sent to the Sultan, after the other presents are delivered, to obtain permission to barter.

On the arrival of a vessel from the eastward near any of the Atolls, a boat immediately puts off to her. The pilot receives a fixed and handsome remuneration from the Hindeggeree, as does also the headman of the Atoll to which the pilot boat belongs. On a vessel anchoring off the town of Malè, the Emir-el-Bahr approaches her in a boat, and hailing the pilot, inquires whether there is any sickness on board. Should there be none, he goes on board, when he is generally presented with a piece of chintz or a shawl, and he then takes the master of the vessel on shore. If there be small-pox on board, the vessel is put under the strictest quarantine for forty days, after the recovery of the person last affected. In case the disease was prevalent at the place from which the vessel has come, though there be no sickness on board, quarantine is nevertheless enforced, but the period under such circumstances is regulated as the Sultan may see fit to order. Public buildings, with godowns, are rented to the traders, who barter their goods in them. The rent charged amounts to twenty or thirty rupees per month. Should all the public buildings be occupied, temporary thatched huts are put up as required.

The Bengal Rupee is the current coin of the islands, and is used in all money transactions.

The part of the external trade, which is conducted by the natives themselves, is carried on chiefly with Calcutta, in boats of from 100 to 200 tons burthen, which leave for Calcutta late in August, or early in September, annually, having the S. W. monsoon in their favor, and return in December, with the N. E. monsoon. The boats, from their build and rig, are totally unfit to work to windward, or to make moderate progress, unless the wind is even abast

the beam ; but smaller trading boats of about 50 tons, whose sailing qualities are somewhat superior, are also used occasionally in trading to Penang and Calcutta.

The articles exported in these boats are cowries, coir, and coconuts. The return cargo consists principally of rice, and generally includes chintzes, silk, and miscellaneous articles, to supply the particular wants of individuals. We were informed that the largest of these boats would carry 7,030 Bengal bags of rice. Each bag is supposed to weigh two maunds of eighty-two pounds each. The navigators of these vessels evince a degree of confidence in making the passage, which is not very common amongst natives ; for, after leaving the Maldivas, they sight no land, until nearing the shore on which stands the pagoda of Juggurnath, sailing right up the middle of the Bay of Bengal.

We heard that for their cargoes one season an offer of Rupees 50,000 was refused.

Though traders who resort to Malè are in general well received, and no difficulties are thrown in the way of their dealings, the feeling with which the authorities seem to regard intercourse between foreigners and the natives, would, until a change, by time and fair conduct, is brought about, which we hope is more than commenced, affect the plans of any person who might desire to take up his residence on the island, whether for commercial or other purposes. The insalubrity of the climate also is a serious discouragement.

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*At the anniversary meeting, held on the 24th ultmo, the following gentlemen were elected Members of the Committee of Management for the ensuing year.*

Col. POTINGER, Col. OVANS, Capt. MCGILLIVRAY, Major CAMPBELL, A. FINLAY, Esq., Capt. J. H. WILSON, I. N., Capt. A. BURNES, Capt. BONNAMY, Capt. HOUGHTON, I. N., J. HOWISON, Esq., Capt. SHORTREDE, Lieut. HOLLAND, JAMES BIRD, Esq., Lieut. CARLESS, I. N., Lieut. DELHOST, A. B. ORLEBAR, Esq., and JOHN SCOTT, Esq.

*The President communicated, with the sanction of Government, A Series of Memoranda on the River Indus, and on the construction of the river boats of lower Scinde. By Lieut. John Wood, I. N.*

THE first of Lieut. Wood's papers on the Indus, in which he describes the voyage of the steamer from the sea to Hyderabad, has not been presented on this occasion, as probably it is proposed to publish it through another channel. The present series is, in consequence, somewhat unconnected. The papers now laid before the Society treat on the following points:—

1st. Notes on the River Indus between the latitudes of Tatta and Hyderabad. These limits embrace a distance of 56 miles, by the winding of the river, which here flows in a general direction, S. S. W.

Lieutenant Wood divides this space into eight *Reaches*, and details, under as many separate heads, the state of the river at the period of his visit. This information is exhibited in the following tabular form, proceeding from South to North.

Reaches.	Length.		Soundings.	Breadth.	Velocity.	Direction.	Remarks.
			Max.				
	Miles.	Fur.	Fm. Ft.	Yards.	In miles, per hour.		
1	10	0	3 0	660	4	N. E.	This Reach extends from Tatta to <i>Atumgate</i> .
2	12	0	2 4	716	4	N. E.	To the termination of the range of sandstone hills, in latitude 35° North.
3	3	1	2 0	705	3	N. E. by E.	From the village of Bunna to Jirk.
4	4	4	3 3	456	3½	E. S. E.	
5	8	0	3 0	590	4	N. N. W.	
6	12	0	4 3½	346	3½	N. N. E.	
7	3	0	4 1	650	3½	N. W.	To Tricul.
8	3	0	3 0	650	3½	N. E. by E.	To Karaka.
						N. W. by W.	To Hyderabad.

The 2nd paper contains Lieut. Wood's notes on the daily variation in level, which the surface of the Indus was observed to undergo in the month of January last. The observations were made on the river as it passes the latitude of Hyderabad, and are as follows.

Amount of daily variation, observed in the level of the River Indus near Hyderabad, for the month of January 1836.											
Days.	Rise.	Fall.	Days.	Rise.	Fall.	Days.	Rise.	Fall.	Days.	Rise.	Fall.
Inches.			Inches.			Inches.			Inches.		
1	$\frac{3}{4}$	0	9	0	$2\frac{1}{2}$	17	0	0	25	0	$1\frac{1}{2}$
2	0	$\frac{2}{4}$	10	0	1	18	0	0	26	0	$1\frac{1}{4}$
3	$\frac{1}{2}$	0	11	0	1	19	0	$\frac{2}{4}$	27	0	1
4	$\frac{2}{4}$	0	12	0	1	20	0	1	28	0	$\frac{3}{4}$
5	0	0	13	0	$\frac{1}{2}$	21	0	$1\frac{1}{2}$	29	0	1
6	$1\frac{1}{2}$	0	14	0	$\frac{1}{2}$	22	0	2	30	0	$1\frac{1}{4}$
7	0	$\frac{1}{2}$	15	1	0	23	0	$1\frac{1}{4}$	31	$\frac{1}{2}$	0
8	0	$\frac{2}{4}$	16	$\frac{1}{4}$	0	24	0	$1\frac{1}{2}$			

From the above statement it will appear, that during seven days, the level of the river experienced a rise, which amounted to  $10\frac{1}{2}$  inches; that during the space of twenty-one days the level was depressed to the aggregate amount of  $22\frac{3}{4}$  inches, and for three days the surface remained stationary. This will give an absolute depression of  $12\frac{1}{4}$  inches, or the 31st January, below the line at which the level was observed on the last day of the preceding month.

The prevailing wind for twenty-eight days, was Northerly; for the remaining three days the wind was S. W.

The mean temperature of the air at sun-rise was  $48^{\circ}$ . F. at 9 A. M.  $62^{\circ}$  — at noon,  $72^{\circ}$  — and at 3 P. M.  $73^{\circ}$ . The temperature of the river water observed at 9 A. M. was two degrees below that of the air, taken at the same time.

In his third paper, Lieut. Wood describes the construction of the various description of craft used in the navigation of the lower Indus; but this subject cannot be understood without the plans and drawings which accompany the original communication.

The fourth paper contains an extract from this officer's journal from November 29th 1835, to February 22d 1836, during which period Lieut. Wood was occupied in re-examining the river between Hyderabad and the sea. The latter part of the journal is here given, as it contains a narrative of his passage in the steamer Indus from Hyderabad, down the river, to the shipping-port, and will furnish some information on the nature of the navigation of this part of the Indus.

*Extract from Lieut. Wood's Journal.*

"February 16. Left in the Indus Steamer for Ghora-Baree. The steamer's draft is three feet, four inches. For ten miles we shot down the stream in fine style, the depth never under one and a quarter fathom. Here the stream became very foul, and the steamer stuck fast on a bank in the centre of the channel. At this very place a similar occurrence happened to the Jumtee, which took Mr. Heddle down to Ghora-Baree. After remaining an hour on the sandbank, the force of the current cut away the sand from under the bottom, and she swung to her anchor in deep water. It was now blowing fresh, accompanied by clouds of dust. To trace the channel farther was impossible, and we remained here for the night.

"February 17. Started at day-light, passed Tricul and Jirk without accident; but a little above Bunna we struck with great violence, and remained immovable in two feet water. A month back there were two and three fathoms of water in the same spot; the deep channel is now on the right bank; it was then on the left. Three quarters of an hour after we struck, there were two fathoms under the bow; when we ran aground, there were two feet. The run and entrance of the steamer are favorable to her getting off sand banks, when the current is strong. Her keel has only to be hove in an oblique line with the direction of the stream, when the current entering under the counter, or bow, quickly cuts away the sand, and she settles in deep water.

"February 18. Left Bunna at sunrise; reached Nooroo-kanad, a distance of nearly forty miles, without accident. Here the river is particularly foul, and wanders in many channels over the whole of its inundation bed. Seldom more than one of these channels is navigable; this one we were not fortunate enough to enter, and after searching in vain for a passage by the one we entered, the steamer took the ground; the current was rapid, and her keel made her roll and strike heavy. Half an hour after she struck, a bank but ankle deep, had formed all along the lee side, the lower paddle boards on this side were buried in the sand, which here, from the eddies caused by the boards, was a foot above the water. On the other side there were four feet fore and aft. The vessel was lying athwart the stream, and pressed up, as it were, against a steep wall. We were four hours in this situation. The boat has now swung to her anchor. We had three pilots on board to-day, but only one when the steamer grounded.

"The events of this day give a good insight into the navigation of this river. Were a line of soundings to be taken across the river where we now are; I doubt not that two or two and a half fathoms would in some part of the line be obtained, as this depth has been found somewhere in every section yet measured. The deep channels are not connected; they are often merely ruts or ditches, which do not communicate with each other. The country boats which descend the river with cargo at this season, keep a small pilot boat sounding a-head. If the same precaution is necessary for a steamer, which doubtless it is, what will steam do on the Indus in these months? nothing; the vessel must not outstrip the pilot boat.

"February 19. arrived at the mouth of the Seanee.\* This morning a Scindee boatman voluntarily tendered his services to pilot the steamer down the Seanee. He desired no payment, and would submit to be flogged, if he got the boat aground. We had not proceeded two miles, when she took the ground, and heeled nearly over; three of the paddle boards were splintered.† The boatman did his best, for the Cutch pilot and myself were both looking out at the time. Though the Scindee had not performed his part of the agreement, it would hardly have been justice for us to fulfil ours."

*Mr. Orlebar presented an Account of the Kuria Muria Islands.*  
By Assistant Surgeon I. G. Hulton.

These islands, situated near the South Coast of Arabia, at a distance of seven hundred and ninety miles from the entrance of the Red Sea, were lately visited by the officers of the surveying vessel now employed in that quarter. The group consists of five islands, viz. Helarnea (Halabi)\*, Ghurzoud (Rodondo), Soda (Sardi), Jibleea (Dcriabi), Haski (Halki), all resembling each other in their barren and rugged appearance. They sustain only a few salt water plants or stunted shrubs, and the water to be found on them is generally brackish. The natives of the neighbouring Coast speak of the group under the term Juzaer-ul-Ghulfan, derived from the name of a powerful family of the Mahra tribe, who claim the possession of

\* Seanee is a local division of the Hujamrec branch, by which the latter is connected with the main river.

† In the part of the Journal presented to the Society, it is not stated in what manner the steamer was extricated from this difficult situation.

‡ The names within parentheses are those by which these islands are commonly known to navigators.

the islands. They are also known under the appellation of Koorec Mooree, and of this term the name by which Europeans distinguish them is probably a corruption. Efrisi mentions two islands of this group, which he denominates Chartan and Martan, both peopled, the inhabitants speaking a language unknown to the Arabs.

Mr. Hulton notices a remarkable resemblance between the ancient name of these islands (Zenobii • Insulæ) and the term Beit Jenobee, applied to the tribes occupying the part of the Coast immediately opposite.

These islands are composed principally of granite; limestone also occurs. In the latter rock fossil remains were discovered, and the former is described to be curiously intersected by veins and dykes of trap. The granite in the largest island (Helarnea) assumes the form of pointed spires, the highest of which is estimated at 1,500 feet. The eastern extremity of the same island presents a bold headland, composed of limestone, which attains a height of 1,645 feet above the level of the sea.

On Sardi, the remains of former habitations were observed, but the only inhabitants at present on these islands are confined to Helarnea. Their number, however, does not exceed twenty-three individuals. These people resemble, in their form and complexion, the Arabs of the Coast. The language they use is a dialect of the Arabic, called *Sherec*, from the tribe by which it is spoken, who live near Cape Morebat. Some of the words and sounds appeared to Mr. Hulton to resemble the dialect in use among the aboriginal Socotrians, and he has furnished a vocabulary with a view of comparing the languages of the two races. A copious vocabulary of the Socotrian, collected by Captain Haines, during his survey of that island, will furnish the means of making this comparison.

The soil of Helarnea being incapable of cultivation, the inhabitants are entirely dependent on the sea for their sustenance, and being unprovided with boats of any description, they are obliged to confine their occupation of fishing to the immediate vicinity of the rocks. They are, therefore, literally *Ichthyophagi*, and live in a state of extreme poverty and wretchedness.

Their intercourse with the rest of the world is very limited, being confined to occasional visits by trading boats, which touch here on the passage between Muscat and the East Coast of Africa, for water. Coasting vessels take shelter among these islands, when they meet with bad weather during the N. E. monsoon. The largest island of the group possesses two excellent anchorages, which can afford



shelter for shipping during either monsoon. This advantage, and the peaceable and accommodating character of the inhabitants, render it a matter worthy of consideration, whether this would not form a preferable station to Maculla, for a Coal Depôt for steamers between Bombay and Suez. By such an arrangement, the distances would be more equalized, as, at present, the first stage from Bombay to Maculla comprises a distance of 1388 miles, and from Maculla to the straits of Babel-Mandeb, 349. By transferring the coal station to the largest of the Kuria Muria islands, the distance would be thus divided : — from Bombay to Helarnea, 946 miles, and from the latter to Perim Island, 790 miles.

*The Secretary read the following Report, which was approved, and ordered to be printed.*

*Annual Report of the Proceedings of the Bombay Geographical Society, for 1835—36.*

Among the contributions received by the Society during the year ending in April last, Captain Burnes' paper "*On the Maritime Communications of India as carried on by the Natives, particularly from Cutch, at the mouth of the Indus,*" is the first in the order of date. In this communication Captain Burnes states, that less diligence has been bestowed on researches on the maritime intercourse of the ancients with the East, than has been directed to the subject of the inland communications. Of Western India in particular, the primitive build of the Indian vessel suggests the existence of a trade long before the date of modern European connection with this country. In the book of Genesis the products of India are mentioned among the imports of caravans to Egypt, which in all probability were introduced via the Red Sea. Hence Captain Burnes thinks it is a fair inference, that if long voyages are recorded to have taken place in those ancient times, the commerce was transported in that manner, and not by land.

The voyages of antiquity appear to have been regularly continued to the present time ; the commerce still exists, and what is more remarkable, the ships are navigated by Hindoos. The particulars of the trade of Cutch may supply a hint that will cast light on ancient times. The principal sea port, Maundvie, has 250 vessels belonging to it, and has a maritime communication with Zanzibar, the whole East Coast of Africa, the Red Sea, Persian Gulf, MeKran, and Scinde, and with India as far as Ceylon. The vessels are from one to eight hundred candies ; they carry a large lateen sail, and are

never decked ; the pilots have acquired the use of the quadrant, and steer by charts. One of these curious documents, intended to represent the voyage from Cutch to Arabia and the Red Sea, accompanied this paper. The original was forwarded to the Royal Geographical Society, and a copy retained for the Society here.

The most valuable branch of traffic carried on from Cutch, is with the Eastern Coast of Africa. Vessels return from thence laden with ivory, rhinoceros' horns, &c. In the trade with that portion of Eastern Africa called by the natives Burbar, the Hindoos are subjected to the most severe privations. When they land they are not permitted to wear a turban ; if they do they are not allowed to be burned according to Hindoo custom, or buried like a Mahomedan. A hole is dug, into which they are put in an erect position. Water, which in their own country they drink only from the hands of a certain caste, is brought in skins of animals recently killed by Mahomedans. Their submission to such privations can be only accounted for by their love of gain ; and Captain Burnes infers from it, that commerce was never interrupted in India by religious prejudice ; that a people who can now carry it on in spite of such disadvantage, have prosecuted it from the earliest ages, and that the natives of India participated with the Arabs in the trade between India and Egypt.

The second contribution from the same member, is entitled "*A few Remarks on the Sea Coast of Cutch; also a Description of the back-water leading from Juckow to the mouth of the Indus.*"

The Seaport of Juckow is situated on the south west Coast of Cutch, upwards of sixty miles west of Bhooj. It is one of the five bunders of the province, and contains four hundred and ninety houses, which, being built of stone and mortar, give the town a respectable appearance. The inhabitants consist chiefly of sea faring people and merchants.

The bunder is about three and half miles from Juckow. The creek on which it is situated is named Gorla ; its depth varies from eight to twelve feet at high water ; its banks are marshy, being so low as to be overflowed at high tides. The country around Juckow is flat and fertile ; the district belongs to the Ubrassa division of the province, and is the only inland town of any magnitude in the Raó's dominions, the Capital excepted.

The principal advantage possessed by Juckow is in the exist-

ence of a creek or back-water, navigable for craft of twenty-five or thirty candies. This channel enters the sea about three miles from the bunder, and follows the curve of the coast, running up to near Kotasir, on the eastern mouth of the Indus, thus affording a communication with Scinde which is maintained throughout the year. This natural canal is called Baggarra. The narrow strip of land between it and the sea, varying from one to two miles in breadth, is covered with rushes, tamarisk, and a stunted grass, forming excellent pasture for camels and cattle, and is so abundant, that numbers of the former are reared on it. The trade of Juckow is considerable. The staple articles of consumption are imported from Scinde and the western parts of Cutch; sugar, iron, &c. from Bombay. There is a small traffic with Damaun and Muscat.

*Accompanying the above communication, Captain Burnes presented to the Society the Geographical Index to his Map of Southern Rajpootana, constructed in 1829 and 30.*

The author has, in this paper, given an account of the countries beyond the N. W. frontier of the Bombay presidency, viz. Parkur, the Thurr, Nueyur, Jaysulmeer, and Joodpoor.

Nearly all the information contained in this communication has been already published by the Royal Geographical Society, in the fourth volume of their Journal.

*The paper on Scinde forms the fourth, contributed during the period embraced in this report, for which the Society is indebted to Captain Burnes.*

This communication having been printed in the report lately issued by the Society, no analysis will be required in this place. It contains all the information which the author has derived from the writings of those who have visited Scinde before him, as well as the result of his personal observations, carried down to the date of the author's late visit to the country, about the month of December last. Additional information respecting the Indus, it may be here observed, has been collected recently by Lieutenants Carless, Pottinger, and Wood. The reports of these officers, when it shall please the authorities to allow their publication, will probably form a valuable addition to our knowledge of the physical geography of the lower portion of this river. Lieutenant Wood has likewise been permitted to remain in the country during the period when the river undergoes its periodical rise, and by this arrangement we may expect that full information regarding this phenomenon will be obtained.

*Lieutenant T. M. Dickinson has favored the Society with "Observations on the Ancient Intercourse with India;" suggested by some of Captain Burnes' remarks contained in that officer's paper on the Maritime Communications of India.*

Lieutenant Dickinson maintains the opinion, that the Arabs alone were in ancient times the great carriers of the Indian trade, and that the natives of this country enjoyed no participation in this transport. He remarks "that there is no doubt of the trade with India having existed for centuries, but it cannot be determined with any degree of certainty by whom it was carried on. We are told, however, that the Arabs were a seafaring race, and we cannot suppose, that had there been in the Red sea, or in the harbors of Arabia, vessels navigated by Indians, such circumstances should have escaped the observation of the Greek geographers, several of whom, including Strabo, were actually on the Red Sea. Pliny states, that eighteen centuries ago the Arabs were settled in such numbers at Ceylon, that they had established their religion on the coasts of that Island. This is confirmed by Ptolemy in the second century. The Arabian Voyages published by Renaudot, also bear testimony to the influence of the Arabs on the Malabar Coast, as does Marco Polo in the thirteenth century. In the fifteenth century, the Portuguese found 15,000 Arabs settled at Calicut."

The testimony of the writers of antiquity, is brought forward in support of this view, and, the peculiar institution of castes among the Hindoos, among which there is found no caste of sailors or navigators, is stated to prove that the occupation of those classes in commercial navigation, which is at present witnessed, is of comparatively modern origin, and could not have been carried on by their ancestors in ancient times. Lieutenant Dickinson, therefore, subscribes to the opinions of Robertson, Vincent, Cardian and others, that the Arabs were the first navigators of the seas of India.

Lieutenant Burnes had stated, in a postscript to the paper in question, that it was not his object to enter on the subject of the trade carried on by the Arabs, the existence and history of which are well known. His principal aim was to show, that the natives of India themselves have carried on a foreign trade from the earliest times, and they were far from being exclusively indebted to the Arabs for their maritime communication.

*Commander Haines has presented a short "Notice on a Part of the Interior of Arabia, accompanied by a Map.*

The map, and the information contained in the paper, were procured from the Turk who filled the office of Governor at Mocha in June 1835, and who himself had traversed a portion of the countries described. The countries laid down in the map, and of which a short description was forwarded, comprise portions of Nedjed, Yemen, and the Hedjaz. The geographical sites of the principal places cannot be considered as accurate, but the relative position of the various towns and villages may be received as tolerably correct, as well as the delineation of the physical features of the country, which consist of a series of vallies formed by lateral offsets from the grand mountain range, which separates the great central table-land of Arabia from the low or maritime regions. Each of these vallies opens towards the sea, and affords passage to streams, which though absorbed by the arid sands of Tehama long before they reach the ocean, become the source of fertility to the hilly districts, and bestow on them a character which contrasts strikingly with the barren nature which Arabia elsewhere presents.

This tract, by its fertility, contributes to supply the wants of the less favored regions. It is occupied by a variety of tribes, whose numbers, aided by the natural strength of the country, have hitherto successfully resisted the attempts of the Turks to subjugate them. The principal of these tribes are the Beni-Asyr, who, including their allies, can bring to the field 18,000 fighting men, and are subdivided into four branches or clans, viz. the Beni Malek, who can muster about 6,000 men; the Beni Mokait, or Beni Islam, amounting to 1,600; the Beni Halcome, amounting to 1,200; and El Umdan, whose numbers are not given.

The whole Asyr territory is described as being almost impregnable, from the stupendous height and intricate passes of the mountains. Every house is in itself a fort for musquetry, and as long as the road to the hills is open, the inhabitants have nothing to fear. Horses are common, and the camels are represented as being remarkably docile, and well adapted for climbing the steep passes in the mountains.

The intermediate country between that of the Beni Asyr and Tayef, is thickly peopled, containing numerous tribes, several of whom are the allies of the Beni Asyr. Among these, are Beni Asthmar, Beni Ahmahr, Beni Sheyah, Nassarah, Tykief, Shelawer, Gaamut el

Beddoo, &c. &c. The country of the Beni Shyeal is described as being remarkably fertile. The people can be trusted, and enjoy a mild government under Shaik Ghoram, who is the chief of the tribe. The principal fruits are, almonds, grapes, walnuts, figs, and limes. Grain of all sorts is abundant, and water never fails. The climate is cold during some months, but becomes more temperate after the rains. They possess horses, cattle, camels, &c. and a soil yielding fruit spontaneously.

*The Society is indebted to Mr. Hyslop of the Hon'ble Company's Sloop of War Clive, now in the Red Sea, for the paper entitled "Notes on the Empire of Tumbuctoo, communicated by a Shaik to Dr. Pruner at Cairo."*

The substance of this paper has been given in the report of the last meeting, since which date Major Felix has obligingly communicated to the Society extracts of his journal, relating to the Bahr el Abiad, accompanied by an interesting note, conveying his opinion as to the value of the Shaik's information. Major Felix ascended the blue river as far as Sennaar, then crossed over to the white river.

The former river had every appearance of flowing from a mountain range, and through a rich soil. The latter evidently came from some great inland lake. The fish were enormous, as were the crocodiles and hippopotami; large oyster shells were found on the banks.

Major Felix always entertained the firmest conviction, that the white river (Bahr el Abiad) and the Niger were connected. He believes with Shaik Mahomed, that one could get to Tumbuctoo, perhaps, by following its stream upwards. He cannot reconcile the Shaik's confused account of getting by water to Sennaar, which is on the blue river. The peninsula between the two rivers must be crossed, and as these flow different ways, and the plain is elevated between them, Major Felix does not think that there is any water communication. About two hundred miles above the junction of the Bahr el Azrek and Bahr el Abiad, there is a tribe called Shelooks, who are an untamable race of savages, but beyond them is the Denka tribe, who are more tractable. Major Felix proposed to go up the blue river as far as possible, and then to strike across the peninsula into the Denka country, thus turning the flank of the Shelooks. The African association sent Mr. Willock to try this route. This traveller died before he got half way, at Khartoom. It is by this route (which Major Felix ascertained was traversed by natives) that Shaik Mahomed must have come. Major Felix regrets that the German

Doctor did not make the Shaik describe his journey day by day, and is totally incredulous about the magnificent temples in the islands "on the river between Tumbuctôo and Sennaar."

At Khartoom, near the confluence of Bahr-el-Abiad and Bahr-el-Azrek, Major Felix visited a chief, Ibrahim Kashef, who had accompanied the troops in the *gazwah* (plundering excursion) to Denka; and who gave a very interesting account of the Bahr-el-Abiad. Courshid Bey marched on the east bank, Ibrahim Kashef on the west. From Khartoom the river continued a united stream for seven days, and then began to be broken by islands. On the twelfth day they reached the first island of the Shelooks, through whose territory they continued marching for fifteen days. On the twenty-ninth day they entered the Denka country, continued six days farther, and then turned back. Ibrahim Kashef could give no idea of the distance the troops marched each day, but, taking an average of ten miles in thirty-five days, have proceeded three hundred and fifty miles up the Bahr-el-Abiad. For the last twenty days the river flowed amongst islands, sometimes uniting, but soon breaking again. On the thirty-fifth day the river was shallow: there were many islands, and the distance from bank to bank was "six hours." Both the *islands* and the *banks* of the Bahr-el-Abiad were so thickly wooded, that it was scarcely possible to penetrate; and beyond the wood on the western bank, was a vast plain, but no mountain. The direction of march was a constant inclination to the West, and at Denka, the sun when it rose was "behind their left shoulders." They passed no rivers.

The Shelooks are described as perfectly gigantic; their color is black, their hair woolly, and their features like those of the negro; both men and women were naked. They possessed neither horses nor camels, but few cattle, and lived chiefly on fish and doorah. They had numbers of canoes, were armed with spears and bows and arrows of great strength, and swam so well that they would attack the crocodile and hippopotamus in the water.

They call their great Shaik their god, saying, that "it is he who gives life, and takes it away; that he causes the river to run," &c. He alone is clothed in a cotton garment. It seems, however, that this Shaik only represents a higher power; for when some of the principal Shelooks came to Courshid Bey, they made him swear by the sun to do them no injury, although they addressed him also as a god. These delegates who came to ask for peace wore bracelets of ivory, and brought for all their treasure a few elephant's teeth, and the musk of the crocodile.

Amongst the Shelooks there were no burying places, nor could Ibrahim Kashef learn what they did with their dead.

The people of Denka inter their dead in an upright position; and when the Denka children are seven or eight years old, two of their front teeth are knocked out.

Courshid Bey was very glad to finish this gazwah, as his troops were exceedingly harassed; not an enemy was to be seen by day, but every night, and all night long, sudden attacks were made on his camp; when his troops got under arms, the assailants disappeared, but returned when all was again quiet. He made a treaty of friendship with the Shelooks, but a few days after, his rear guard (probably a set of stragglers) was cut off and murdered. He says the country is so poor, and the difficulties so great, that he shall never attempt another gazwah on the Bahr-el-Abiad.

The mountains about one hundred and fifty miles to the S. W. of Sennaar, and sixty or seventy from the river, are under Idress Adelan; the town of Gooleh, his capital, is said to be as large as Sennaar, and to be famous for its workers in iron. Idress Adelan was the last Vizier of the deposed Melik of Sennaar; he is represented to be a man of talent, power, and of noble manners; his territory extends to within five or six days journey of the Denka frontier, and as he speaks the Denka language, he must have friendly communication with that people. Major Felix concludes by stating, that were an attempt made to ascend the Bahr el-Abiad, he would recommend the traveller to place himself under the protection of this chief who would escort him to Denka, and thus avoid the Shelooks, through whose territory it seems impossible to penetrate.

*A Memoir on the Southern Coast of Arabia, by Lieutenant J. R. Wellsted, I. N.*, was communicated through the President.

The portion of the coast described in Lieutenant Wellsted's paper lies, as stated in last report, between Aden and the town of Sahar.

There is a little diversity in this portion of the coast of Arabia. A succession of ridges, increasing in height as they recede from the line of coast, form a chain of mountains that constitute a part of that continuous range which nearly encircles the whole Peninsula. Between the bases of these hills and the sea, a strip of low land of irregular breadth forms the Tehama. The general elevation of this chain is estimated at from 3 to 5,000 feet above the level of the sea, and the highest points are Djibel Fouthalee, near the town of Shougree, and Djibel Ummeera between Ras Goseyn and Mughadain.



These mountains are chiefly composed of primitive limestone, and usually assume a tabular form, the rock presenting numerous holes and cavities throughout its mass.

The low land is of an arid and barren appearance, the soil consisting generally of a loose sand. Some spots, however, are watered by streams which flow from the hills.

The towns on this part of the coast are——Aden celebrated for its harbours and former commercial importance, but having at present a population not exceeding five hundred, composed of Arabs, Soomaules, and a mixed race, the offspring of slaves.

Lahadj is situated at the distance of twenty-eight miles from Aden in a N. E. direction. This is the chief place of the small territory, of which Aden forms the seaport. Here resides the chief, Sultan Mahasson, by whom Lieutenant Wellsted was well received. The population of this town is estimated at 5,000, of whom 1,500 are troops. The district immediately surrounding it is fertile, being watered by streams flowing from the mountains, and producing abundance of grain, fruit and vegetables. Market days are established twice weekly, when the Bedouins from the desert assemble in this town, and exchange their ghee, frankincense and milk, for grain and cloth.

Shougree is situated on the coast to the eastward of Aden; it is not entitled to the appellation of a town, being a straggling place, consisting of about thirty houses, and three times the number of huts. The importance of Shougree is derived from its forming the seaport of the district of Djaffa. The place is in the hands of the principal tribe of Bedouins called Fouthalee, the Shaik of which resides here. The principal exports are madder and coffee, in exchange for which grain and dates are received. Djaffa, or Jaffa, the district of which Shougree forms the seaport, is a hilly, elevated region resembling Hydramaut; the inhabitants are chiefly occupied in the cultivation of coffee, madder, wheat, Indian corn, and senna.

The town of Hawher, though situated only five miles from the sea, and a place of considerable extent, has not yet been laid down in any map. The number of houses may amount to six hundred, and the population to 2,000.

Broom is a small village, situated on a bay of the same name, which is well known to Arab sailors, as it affords excellent shelter for their boats during the S. W. monsoon. The village is situated in Latitude  $14^{\circ} 20'$  North Longitude  $49^{\circ} 02' 50''$  East, but the place is considered unhealthy.

The town of Maculla may be considered the seaport of the district of Hydramaut. The population may amount to 5000. The inhabitants have various occupations, but the greater number are engaged in maritime pursuits, and in the inland trade, which is carried on between this place and Hydramaut. The duty levied on all imports without distinction is five per cent., and the amount of revenue derived from this source is estimated at 10,000 dollars annually. At this place Lieutenant Wellsted collected some information regarding the district or province of Hydramaut, but he found it impossible to visit the country, though very anxious to do so. Hydramaut, known generally as forming one of the large modern divisions of Arabia Felix, is also applied by the Arabs of this part of the coast to denote a province not exceeding sixty miles in length, in direction parallel with the coast, bounded north west by the province of Jaffa, and on the east by that of Sahar. It is exceedingly fertile, and contains many towns and villages, of which Lieutenant Wellsted obtained some scanty information from banians residing at Maculla, who had visited the province.

Shaer, or Sahar, is the most easterly of the towns visited by Lieutenant Wellsted on this portion of the Arabian coast. It is one of the largest on this coast, and is much resorted to by native coasting vessels. A duty of three and half per cent. is paid on all imports, on a valuation fixed by the Emir-el-Bahar.

The amount of population inhabiting the part of the coast described in Lieutenant Wellsted's paper, cannot be determined. The inhabitants are principally of a mixed race, but the higher classes belonging to tribes which occupy the hilly provinces of Hydramaut, Jaffa, Sahar.

Regarding the commerce carried on at different ports along the coast, Lieutenant Wellsted observes, that "it was from this coast that the first branch of that extensive commerce between the Eastern and Western world, which has so much contributed to the wealth and power of every nation which participated in it, was first carried on, and where we learn, from the earliest historians, that navigation in the conveyance of the precious merchandise of the East made its efforts. Deterred by the dangerous, intricate, and tempestuous passage up the Red Sea, vessels from a period equally remote landed their cargoes at the various ports along this shore, whence they were conveyed by caravans to Egypt and Syria. Arabia the happy, comprehending the provinces of Hydramaut and Yemen, became enriched by this extensive commerce, and seems to have merited that ap-

pellation. But when the current of the India trade, influenced by the discovery of the passage round the Cape, changed its direction, the commerce of South Arabia necessarily declined. Yemen, in a measure, recovered herself by the exportation of coffee, then a new discovery; but Hydramaut, in her scanty supplies of incense, aloes, &c. has never recovered her former consequence.

The imports from India are, iron, lead, tin, nutmegs, pepper, and other spices; sugar and sugar-candy; silk in the yarn dyed either red, blue, white, or green; English longcloths; white cotton and satin cloths; fine muslins from Surat, and a considerable quantity of earthenware. The export cargoes which are received in exchange for these, principally at Bombay and on the Malabar Coast, are mostly gums, dragoon's blood, and madder. Aden, Maculla, and Sahar, employ in this traffic about sixty vessels of various sizes; none, however, exceeding two hundred tons. The largest of these with a high stern, a wedged shaped and projecting prow, a single mast and an enormous sail, are styled Buggalas; all the others, though differing in some trifling particulars, bear a general resemblance to these. The practice, which is noticed by some of our earlier travellers on this coast, of sewing instead of nailing the planks, is now discontinued. A boat is occasionally built at Muttra, but as Arabia is utterly destitute of any timber fit for this purpose, their vessels are all constructed in India.

Departing from the Arabian ports in September, the largest vessels proceed to Eastward as far as Ras Fataque, while the smaller proceed to Ras-el-Had; from thence they strike across, and make the coast of India about Porcbunder. Although every vessel carries a pilot, yet they have rarely any instruments for observation, and they ascertain their approach to the coast in the same way as the Greeks of old, by the discoloration of the water and the appearance of snakes."

*Captain Moresby's Reports on the Maldivas* having been, by permission of Government, placed at the disposal of the Society, the Committee are enabled to submit the following summary of information regarding the present state of these islands, extracted from the above documents, and from the papers furnished by Lieut. Robinson and Dr. Campbell of the H. C. Ship Benares.\*

\* Since this report was drawn up, the memoir on the inhabitants of the Maldivas in the present number was received. Many statements in this sum-

A survey of this chain of coral islands, which extending from 7° 7' N. Latitude to 40' S. Latitude, cross the track of our trade to India, has been for many years considered of the greatest importance to navigation in these seas. Mr. Horsburgh, in particular, has exerted himself to obtain this object for the interests of geography; and through his instrumentality chiefly a survey was directed. Accordingly the survey of the Red Sea having been completed in April 1834, Captain Moresby was ordered to proceed in the H. C. Surveying Ship Benares, having under him as tenders the Royal Tiger schooner, in charge of Lieut. F. T. Powell, Assistant Surveyor, and the Maldiva, a large decked boat.

The Benares arrived at Malé on the 15th November 1814; but her appearance excited among the natives such apprehensions, as augured ill for any friendly intercourse. In order to understand the feelings which actuated them, we must refer both to a natural timidity of character and to recent political circumstances. For the tyrannies of the reigning Sultan, and the misconduct of his ministers had, two years previously, provoked a rebellion headed by his younger brother Hamed Didee. The insurgents were successful; secured the person, and threatened the life of their Sovereign, who procured his safety and release by promising to satisfy their demands. Hamed nevertheless, dared not trust himself to the royal word, but embarked by night on board a large boat, and steered for the Coast of Arabia; but in the Gulph of Aden his provisions had failed, his boat was leaky and so damaged, that there was little probability of escaping death either from famine or in the sea. In this distress, the H. C. Surveying Brig Palinurus, Commander Haines, came in sight, and supplied them with provisions, as well as repaired their damages. Hamed was now enabled to reach Mocha, and eventually Cochin, where he continued watching the course of events at home, and where he was supposed to be meditating the execution of a threat he had made before leaving his country, that he would revenge himself by a Malabar invasion, the horrors of which had been felt in former days by the Maldivians. Captain Moresby was naturally supposed to be the minister of Hamed's vengeance; and as soon as the Benares anchored, a boat was sent off to demand the cause of coming. Their uneasiness was not removed by a request to survey.

The suspicious nature of Captain Moresby's avowed object now

mary, which appear as repetitions, will be explained by this circumstance, as it was considered advisable that Messrs. Young's and Christopher's papers should be printed unaltered.

co-operated with political circumstances upon minds whose characteristic trait is fearfulness. The natives exhibited an excess of this weakness, not only in their intercourse with the officers of the Benares, but in their intercourse with one another. One instance of this is given in the custom, which prevails among them, of suspending cowries to the inner side of the outer door of their houses, in order that the entry of a stranger may not surprise them. Cautiousness and secretiveness, were observed to be the most developed of all the phrenological indications.

An interview with the Sultan being proposed, his ministers came on board in unusual state, and apologized for delay, on account of their master's ill health; but were very careful not to commit themselves by answering the questions put to them. Nothing could be obtained from them many days. At length the Sultan's health being improved, an interview was settled, but the appointed day being arrived, the Sultan had a relapse. Captain Moresby was compelled ultimately to inform them, that he should commence the survey on a certain day with or without their consent; and operations commenced on that day without permission. The Benares having quitted the islands for the coast, the Maldivians were again alarmed by a letter from the Bengal Government regarding the establishment of a coal depot. After the return of the Benares, the natives appeared more easy, although by no means free from apprehensions: for they objected to the surveying flags, and were not satisfied until they were permitted to set up their own also.

The obstacles in the way of friendly intercourse were eventually removed by events consequent to the death of the Sultan, and the accession of his second son; for, the distresses of the people were increasing, and the public voice demanded the recall of Hamed Didee. The young king accordingly invited his uncle to his councils, in which he is now the most influential adviser, although he has declined any official situation. He has taken advantage of his present position to pay a debt of gratitude, by supporting the wishes of the Company in effecting the survey. He has represented to his countrymen the folly of opposing a Government which is so powerful, and from whose dominions they derive their daily bread: on the other hand, he endeavoured to remove any bad impressions which the conduct of his countrymen might have given; and lastly, he obtained permission for Lieut. Young and Mr. Christopher to remain at Malé after the departure of the Benares.

The importance of these services may be appreciated, by consid-

ering the character of timidity, which has been attributed to them above, and the popular belief in future events, whose close approach is indicated to them by circumstances which they observe. They have a tradition, that they shall one day be subjugated to Europeans, the population shall diminish, and their island shall gradually sink down into the deep. They observe the Atolls to be wasting away; in some the cocoanut-trees are standing in the water; in another the black soil of the island is discernible at low water thirty feet from the beach; the South-east side of an island in Phaidee Pholo Atoll is entirely gone, but is marked by a banyan tree in the water. They say that some islands have disappeared entirely, and instance near the island Wardoo a rocky shoal, which (they say) was once an island in the Atoll-Milla-Dou. Some of the outer edges of the islands have fallen into the sea, which is fathomless in those parts. It is, however, acknowledged that reefs have arisen from the water, and gradually formed islands; and the inhabitants of Malé remember the outer edge of a circular reef in their harbour to have had two fathoms in the shoalest part, which is now dry at low water.

They mark the approach of evil days also in the diminution of population and general deterioration: yet the necessaries of life are so abundant, that a beggar is never seen; nor can this retrogression be attributable to war or dissension, for they have been in peace for many years, and now have no army with the exception of a militia formed out of about four-fifths of the male inhabitants of Malé; the whole population of that island being only between 1,500 and 2,000, of whom the majority are females.

The awkwardness of their sword and spear exercise on festivals, shows that they are little accustomed to use them. Their only duty is to serve in rotation (forty together) with musquets at the palace.

The declining state of commerce, is probably, the chief cause of their present distresses. Lieutenant Robinson observes, that Pyrad speaks of thirty or forty vessels loaded with cowries, and one hundred with cocoanuts, annually leaving the island; but now not more than one-fifth that number of vessels altogether visit the islands. Nevertheless, the profits of the Maldiva trade is considerable. The vessels, in which it is carried on, are of about one hundred tons burthen, commanded sometimes by Europeans and sometimes by natives. Presents having been made as port-dues, godowns are assigned, and shops opened, where the traders barter for the country produce. The natives bring dried bonito, coir, cocoanuts, cowries, and

tortoise-shell. There is abundance of the last article. Cowries are valued at Malé at one rupee per Goolah, which is a bundle of about 1,200. Cocanuts of the island are prized for keeping much longer than those of the Coast. Coir from Filla-dor-Matis is estimated at thirty per cent. more than that from any other Atolls. Bonito is usually taken to Sumatra, where a lac is sold for 2,000 Spanish dollars, having been purchased at Malé for something less than 2,000 rupees. In 1824, no less than seventy-six lacs of fish were purchased by English vessels alone; in another subsequent year, fifty-six; but in another, only ten. Mats also are exported; they are made of a grass which grows in the southern islands. In exchange are given rice, betel-nuts, tobacco, common crockery ware, red handkerchiefs, and sugar. There is little demand for the two last mentioned articles; as the natives extract from the cocoanut a kind of sugar called "ghoor," which tastes like honey; and they wear the native cloth, which is woven principally at Makos Madou Atoll. They often spend weeks in the manufacture of a single piece, which enables them to make it both pretty and strong, notwithstanding their ill-constructed looms. Rice is purchased at Calcutta and Chittagong at eight rupees per candy, and is sold at Malé for goods to the value of sixteen or twenty rupees. This system of barter, however, detains the masters of vessels four or five months, during which their crews suffer much from sickness.

The sickness to which strangers are most liable, is a bowel complaint, which appears peculiar to these islands. The only remedy is immediate departure for the continent. About fifty years ago, the Malabars took Malé, and held it for some time, when they were attacked by this disease, and compelled to give up their conquests. Since that event, the Malabars have believed that the Maldivians in revenge supply traders from their coast with poisoned water. Dr. Campbell has collected many cases, in which its destructive effects upon foreigners is shown; but the natives also appear liable to it, for in one instance nearly the whole population of an island was carried off. There appears to be few other diseases of importance, with the exception of beriberry. Fevers are common, but small pox is unknown, except in cases of importation from the continent. Quarantine laws, however, exist to prevent such cases. Dr. Campbell attributes the unhealthiness of strangers partly to the lagoons and marshes formed by the lagoons throughout the islands, and partly to the unvarying temperature of the climate. When the Benares first visited the islands, the monsoon had just cleared away; the

thermometer ranged between  $80^{\circ}$  and  $82^{\circ}$ . When the violent monsoon showers set in; it fell as low as  $75^{\circ}$ , but rose only to  $80^{\circ}$ ; and after the monsoon the range was between  $82^{\circ}$  and  $85^{\circ}$ . The dews were at times hardly perceptible on shipboard.

The unhealthiness of the climate has been long notorious, and it has doubtless been the great obstacle to foreign intercourse and internal improvement. But the intellectual and moral dispositions of the inhabitants appear such as would justify warm expectations in the philanthropist. Among themselves, the Maldivians are quiet and inoffensive.

War and murder are scarcely known; theft is uncommon; timidity is their greatest weakness; but this is not sufficient to overcome their humane feelings, as many shipwrecked strangers (among others *Laval*) have borne ample testimony. Extreme gentleness of disposition and disinclination to crime, has imparted mildness to an ultra despotic government. No man may presume to sit in the royal presence. The Sultan attires himself after the manner of an Indian Musalman; but no other dare wear more than a cloth around the loins, and a plain red handkerchief on the head. The pilot of the Benares wore a blue vest on board, but invariably took it off before landing. The property of the principal ministers, as well as of all other government servants, falls to the Sultan in case of death. Notwithstanding this contempt of freedom, the severest punishment is scourging and exile to one of the barren islands in the south. Crimes of greater or less magnitude are punished with banishment to more or less barren islands. Minor offenders are merely scourged. Sometime since, some culprits escaped to the Malabar Coast, and were pardoned by the Sultan in consideration of the perils which they had encountered. No bad consequences follow this leniency, for here the Government is secured, as well by the mildness of its subjects as by the veneration with which the Maldivians regard all superiors.

In the latter respect, they are remarkably distinguished from all other nations whether civilized or uncivilized. The latter rank themselves the standard of excellence; but these islanders think of themselves as the most base of mankind. The same feeling prompts them to bestow (perhaps) undue honor on the graves of their holy and great men. Passages from the Koran are frequently read over their tombs, or a pall of white cloth is raised above, and flowers are strewed about them. Sometimes the couch of the deceased is preserved, and adorned with flowers. Yet they are not so supersti-



tious as might be expected of so ignorant a people. When a boat is first launched, an ornamented model is offered as a propitiatory sacrifice to the winds and waves ; and after recovery from sickness, a small piece of cloth is set up by a mosque or some famous grave.

From a phrenological examination, Dr. Campbell concluded that this favorable view of their moral dispositions is not incorrect, since the organs of destructiveness and combativeness were seldom distinguishable ; but those of benevolence and veneration are strongly developed. Dr. Campbell's observations are equally favorable to their intellectual powers, among which constructiveness and order appear most prominent. Although the goldsmith and the silversmith have no opportunity to display much skill, their sole employment being to make ornaments for children, yet their steel knives show that the native blacksmiths understand how to combine utility with elegance. The blacksmith's bellows are also an ingenious contrivance. Their mats, mosques, tombs, and boats, evidence great mechanical ingenuity. Considerable taste is shown in constructing the tanks which are used for ablution in the burial grounds. Some houses (but in ruins) were observed to be built of madrepora ; one of them being of two stories. All the houses are very neat, and are shut out from the road by a fence five or six feet high. Rows of betel and cocoanut trees line the roads, which are excellently constructed in all the islands, but particularly at Malè.

Nor do the natives appear indifferent to improvement ; for all (but particularly the chief) evinced a strong desire to become acquainted with our language, and with our knowledge. But no great exertion can at present be expected from them. Habitual idleness has debilitated their constitution, although this might be much strengthened by an improved diet and the cultivation of their soil, which, in its present state, is a fruitful source of disease. In the southern islands is the least cultivation, and the most rain, which, falling upon a light sandy soil, produces a vast number of wild plants, whose decay infects the air with disease ; and here accordingly were observed a great number of infirmities. The water also of these islands is bad, brackish in the wells, but this is partly remedied by collecting the rain from the trees in the rainy season. At Malè and in the northern islands, the appearance of the people is improved.

*Lieutenant Del Hoste's Journal of a Mission to Scinde*, has been noticed in last report.

*Lieutenant Ormsby has presented a Memoir on the Rivers of Mesopotamia*, which contains the result of his observations during a residence of two years in ancient Babylonia ; part of this time was devoted to the survey of the Euphrates and Tigris, by the direction of the British Resident at Bagdad. The *Narrative of a Journey across the desert from Hit to Damascus*, by the same officer, concludes the list of communications received by the Society for the period now reported on.

During the year ending in April, the Committee have, through the liberality of Government, procured for the Society an apartment in the Town Hall, which has been granted on condition that, when the room shall be again required for the public service, the Society will be expected to give it up. The liberality of Government towards this institution has been likewise manifested by the grant of a donation of five hundred rupees, and fifty rupees per mensem, in aid of its objects, and in compliance with an application made by the Committee on behalf of the Society.

A letter has been received from the Geographical Society of Paris, (the first institution of the kind established in Europe,) inviting correspondence with this Society, and an exchange of publications. This obliging communication is here given.

*“ Monsieur le Secrétaire de la Société Géographique, Bombay.*

“ Monsieur—La Société de Géographie de Paris a appris avec un vif plaisir la formation à Bombay, d’une Société spécialement consacrée à l’avancement d’une Science qui fait depuis plus de douze années l’objet de ses propres travaux.

“ Empressée d’applaudir à des efforts dont elle est heureuse d’avoir donné le premier exemple, associée d’intention à l’œuvre que s’est proposée votre honorable Compagnie, la Société de Géographie de Paris a désiré ouvrir avec Elle, comme déjà elle l’a fait avec les Sociétés Géographiques de Londres et de Berlin, des relations de confraternité, de correspondance mutuelle, et d’échange de publications.

“ Ne possédant plus d’exemplaire du 1er volume de nos Mémoires dont l’édition est épuisée, nous regrettons de ne pouvoir vous en adresser une collection complète, et de ne pouvoir vous offrir, quant à présent que les tomes 2 et 3 (in 4°) Deux autres volumes sont sous presse, et vous seront transmis dès le moment de leur publication.

En attendant que nous ayons, par la réimpression de quelques cahiers épuisés, reconstitué la première série de notre Bulletin mensuel (20 vol. in 8vo), j'ai l'honneur de vous adresser le premier volume, récemment terminé, de la nouvelle série : les cahiers suivants vous seront régulièrement envoyés au fur et à mesure de leur émission.

" Je suis heureux d'être, en cette circonstance, l'interprète de la Société de Géographie de Paris, puis que j'y trouve l'occasion de vous offrir, Monsieur, avec l'hommage de mon respect pour votre honorable compagnie l'expression personnelle de ma considération la plus distinguée.

Société de Géographie,  
Paris, le 25 Aout, 1834.

" D'AVEZAC,  
" Secrétaire Général.

" P. S. Permettez moi Monsieur de joindre ici, comme un hommage individuel pour votre Savante Société, un Memoire relatif aux observations astronomiques de Mungo Park en Afrique. Veuillez souffrir aussi que j'en insere pour vous même un exemplaire."

The Committee have much pleasure in calling the attention of those interested in the progress of this Society, to the increased number of contributors, and to the increasing interest and variety of the papers which have been received during the year. Compared to any preceding period since the establishment of the institution, the past year presents a gratifying advantage in this respect, and the Committee entertain the hope, that for the present year this advantage will be greatly increased. The publication of its reports, now commenced, will place the Proceedings of this Society more frequently before the public, and the advantage of this measure cannot fail to be soon experienced.

The service, (the Indian Navy,) among the members of which the Society has found its earliest and most numerous supporters, is at present so distributed over various parts of the Eastern ocean, that the fairest opportunities are enjoyed for collecting that kind of information which the Society most desires.

One party of officers in the H. C. Brig of War *Tigris* will, in the course of the present year, have an opportunity of visiting Torrey Straits, and of traversing the group of the great Eastern Archipelago, probably in directions different from those usually followed by traders to the China seas and Pacific.

The summary of information regarding the Maldivas, submitted in this report, and extracted from the papers forwarded by Captain Moresby and his officers, cannot fail to excite general interest in the

progress of the important survey of these islands now in operation. Lieut. Young and Mr. Christopher who have been employed in this survey, solicited and obtained permission to remain on the islands after the departure of their vessel during the monsoon, notwithstanding the prevalence of a formidable disease which had produced great mortality among the crews of the surveying ships, and had obliged the latter more than once to abandon the islands, and finally, to return to Bombay for a fresh equipment.

These officers have been amply rewarded for the privation to which they were subjected, by the full attainment of the objects for which they were induced voluntarily to endure these hardships. During their sojourn on the islands, they were instrumental in saving the lives of the crew of an unfortunate vessel which was shipwrecked on one of the Atolls. They have succeeded in acquiring a knowledge of the language spoken by the Maldivians. Their observations on the character, customs, and condition of the people, and on the nature and extent of the commerce carried on by them, have been embodied in a memoir, which by permission of Government, has been placed at the disposal of this Society, and is printed in the present number.

The survey of the South Coast of Arabia, now carrying on by Commander Haines in the *Palinurus*, has already afforded that officer the opportunity of contributing information on the interior of the country in the vicinity of the line of his operations, and has enabled Lieut. Wellsted to furnish the important Memoir on the portion of that coast between Aden and Sabar, both which contributions have been noticed in this report.

Animated by a laudable zeal for the progress of geographical discovery in Arabia, Lieut. Wellsted, who has recently been much engaged in surveying the coast of that peninsula, attempted in October last, in company with Lieut. F. Whitelock, to penetrate into the interior of Oman by Muscat, and to advance to Deraiah, the capital of the Wahabees. The former of these enterprising officers has returned, being unable to reach the limit which he had proposed, from the distracted state of the country; but he has travelled through the province of Oman in various directions for the period of four months, and has collected information regarding the country, which has been forwarded to Government. His companion, Mr. Whitelock, has remained in Arabia, with the intention of proceeding, by Bahrein, to examine the country about Katif. This officer may possibly reach Lassa, and fix the site of the chief place of that province, which is still a desideratum in geography. He then proposes to cross over to

the Chaub territory, at the head of the Persian Gulph, on the Persian side of the Shutul-Arab, where he intends to examine the rivers which flow through that district into the sea.

On the Indus, Lieut. Wood, as mentioned above, is prosecuting the surveying operations, which were commenced last season by himself and the officers of the *Nerbudda*; and on the Euphrates, Mr. Lynch, I. N. an early contributor to this Society, is engaged in the interesting expedition on that river, under the orders of Colonel Chesney.

*The thanks of the Society* are especially due to those officers of the military service, who have contributed the valuable papers noticed in this report; thus affording a gratifying earnest that the Society shall soon realize the prospect, to which it looks forward with anxious interest, of receiving from the members of that branch of the service that general support, without which this institution can never attain the objects for which it was established.

The Committee conclude this report by inserting the subjoined extract of a letter from Mr. Elphinstone, addressed to a zealous supporter of this Society, showing the opinion which that enlightened individual entertained of the benefit to be derived from the establishment of a Geographical Society at Bombay.

Extract of a letter from the Honorable Mountstuart Elphinstone, dated Rome, January 19th, 1832.

"I am extremely obliged for your zealous support of my recommendation of the Geographical Society. I do hope it will receive cordial assistance from those whose duties enable them to promote its views. I take an interest in it, less for the credit of the nation, than of the Presidency and of India. We have some reason to complain that paths of enquiry which are accessible to people in Europe, are closed to Indians, but here is one in which all the advantages are on our side; and if we show less activity than our countrymen at home, I do not know what excuse is to be offered. The search of the public records ought certainly to produce something. Captain Burnes is a host for zeal and opportunity of giving it employment. "The Persian Gulf and Red Sea, and their borders, afford most promising ground for enquiry. I believe the survey ships are now in the Red Sea; and if there is any body at Mocha, they might, by examining the Soumalees, and other people from the opposite Coast of Africa, who come in numbers to Mocha, get a great deal of valuable information both about geography, strictly so called, and manners. Even the Company's oldest provinces would yield much in the department of statistics, which would be both curious and useful at home." \* \*

*III.—Descriptive Sketch of the Islands and Coast situated at the entrance of the Persian Gulf.* By Lieutenant Whitelock, I. N.

Passing two rocky islets on the Arabian shore, which are called the Quoins, you enter the Gulf of Persia, and there are few parts, within it which present a higher claim to attention than this; for the whole region on every side abounds in historical and classic interest.

On the right hand, beneath a lofty mountain, called by the Arabs Jibal Shamāl which is seen towering far above the other hills on the Persian shore, with its summit clad with snow, even in the spring season, lies the far famed Island of Hormuz. On the other hand, Larek; and only a few miles farther on, the town of Gamrún, which in opulence and magnificence was only inferior to Hormuz. Kishm also, the ancient Oaracta, and Minaw, near which took place the meeting of Alexander and Nearchus, are situated in this vicinity.

The former renown of the Island of Hormuz has often occupied the descriptions of earlier travellers. My object in this sketch is to describe the island as it is at present; and this, when considered with reference to its former opulence and splendor, may not be deemed wholly uninteresting. Hormuz is 12 miles in circumference; its form is nearly circular, and its appearance from seaward is broken and rugged. The surface, entirely denuded of soil, exhibits the various tints of its singular stratification, which, with the conical shape and isolated position of the numerous small hills composing the island, gives the former a highly volcanic aspect, and would induce us to attribute the origin of the island itself to the same agency.

With a pilot, Hormuz may be approached from either hand without apprehension. The harbour, situated on the N. E. side, is both secure and convenient. To this, and to its insular and otherwise advantageous position, must be attributed its former importance. The fort, in latitude 27° 6' N. longitude 56° 29' E. is situated about 300 yards from the beach, on a projecting point of land which is separated from the body of the island by a moat. The position is remarkably well chosen, and the whole, with the exception of the ordnance, which has been destroyed by time and rust, is still in good condition.

A few hundred yards from this, now tottering in ruins, stands the light-house, which must formerly have been a fine building; the spiral stair-case still exists, but it would be dangerous to ascend it. A level plain extends for some distance to the N. E. of this building, having its surface scattered over with mounds and ruins of former

habitations. Several tanks and wells have also been sunk here; the former, though now out of repair, are covered over with an arched roof; they are about 15 yards in length, and 7 or 8 in breadth. As there are no fresh water springs on the island, the inhabitants are wholly dependent on the supplies which are collected in these reservoirs during the rainy season.

Across this plain towards the rugged hills which line the eastern shore of the island, a singular phenomenon presents itself, which strikingly resembles the "Mer de Glace." The hills for a considerable distance from their bases are covered with an incrustation of salt, which in some places has the transparency of ice; in others, its surface is partially covered with a thin layer of a dusky red colored earth, receiving its tinge from oxide of iron, with which the whole surface of the island is deeply impregnated. As we ascended the ridge, our progress was continually impeded by deep pits, on the sides of which the saline crystalizations have assumed a stalactitic form. From the summit you obtain a noble view of the whole of the lower parts of the Gulf; the Quoins, Cape Masandam, (Ras Mascate,) Larek, and the island of Kishm, are all distinctly seen.

The Imam of Muscat has possession of Hormuz at present. He farms it from the King of Persia, and retains in the fort a garrison of a hundred men, commanded by an officer, who is styled Shaik. A small sum is collected on account of the salt, which is exported in large quantities, and conveyed to different parts in the Gulf. When the island was surveyed in 1827, the number of inhabitants, who had no other employment than that of collecting this salt and fishing, was estimated at 300.

A few fowls and some sheep, brought from the main, may be obtained here, but no other supplies; nor is its port at any time visited by vessels for other purposes than to obtain salt, or for shelter during the prevalence of the westerly winds.

Such are the few remains that are left to denote the former opulence of Hormuz. The wretched habitations of its present occupants, and the dreary and barren aspect of the surrounding hills, destitute of vegetation, would not lead us to recognize this spot to be a fitting site for the city which contained 4,000 houses, and 40,000 inhabitants, whither merchants from every quarter of the globe resorted, outvying each other in the display of wealth and luxury.

The kingdom of Hormuz, or Hormuzeia, situated on the adjacent main, gave its name to this island, which, according to some authors, was previously called Jerûn. It is impossible to ascertain at

what period this island was first occupied, but there are various authorities to prove, that it has often served the inhabitants from the main as a retreat, when suffering either from civil commotions, or foreign invasion. The advantages of its harbour joined to its insular position, converted it from a barren rock, to which nature has denied even water, into the emporium of the East. • •

Nearly opposite Hormuz on the Persian shore, the river of Minaw enters the sea, in latitude  $27^{\circ} 7' 48''$  N., longitude  $56^{\circ} 49'$  E. Following the course of this stream, which is very tortuous, we reached the town of Shah Bunder, which stands on the bank at a distance of 14 miles from the sea by the winding of the stream, but only 8 in a direct line. To this point, which forms the extreme limit which the tide reaches, the river is navigable at high water for vessels of 20 tons; its average width being 100 yards, and its general depth about 6 or 7 feet. At low tide its bed is laid almost entirely bare, and it then has the appearance of a foul, muddy creek.

There is a custom house, besides a few other houses at Shah Bunder, as boats either receive or land their cargoes here, which are conveyed by land carriage to and from Minaw. Leaving Shah Bunder, and after proceeding for about 2 hours over a fertile plain, we reached a small town named Hagiabaú. Here we put up in a small house, which had been prepared for our reception, by the Shaik: but although situated in the most respectable part of the town, it had more the appearance of a store room for grain than a human habitation, and we found the heat very oppressive, notwithstanding it was at a cool period of the year.

From the appearance of the houses, and the state of the bazars, I do not conceive that this town either possesses wealth, or is of any commercial importance. The number of its inhabitants may be estimated at 6 or 700, and they are principally engaged in agricultural pursuits. Bullocks, sheep, and goats, are very numerous; and when a dearth occurs on the island of Kishm, a great number are sent over there.

The fort of Minaw, distant about a mile from the town, is situated on elevated ground on the southern bank of the river, which winds round its base. It is of a quadrangular form, flanked by round towers at the corners, in which there are a few old guns, bearing inscriptions in Portuguese and Dutch. A draw-bridge, thrown across a moat, leads to a gate thickly studded with iron knobs and spikes on the south-western side.

The walls are strong, and the fort is generally in good condition;



the garrison consists of about 100 men well appointed, who are obliged to be constantly on the alert, in consequence of the numerous marauding bands who rob and plunder the country. The fort, however, is commanded by a hill on the N. E. side, but in a country where the use of artillery is nearly unknown, this is of little consequence.

The river at this point is little more than a mountain stream; its width is about 130 yards, and the water is clear and deep. It takes its rise from the mountain called Jibal Shamāl, distant about 30 miles. Notwithstanding its present insignificance, when the snow melts on the hills, or heavy rain falls, it swells into a large and rapid stream. In some parts where the river is fordable, I observed its bed to be composed of coarse gravel, with small pebbles of primitive rocks, which have been brought during the floods from the surrounding mountains. The steep banks near the sea exhibit a succession of alluvial deposits. The district comprehended between the fort and the sea bears the general name of Minaw; and to the river it owes a great portion of its fertility. Numerous artificial rills conduct the water over the face of the country, and afford near the banks a constant supply; but in tracts more remote the grounds are irrigated from wells. The water is drawn up by bullocks, either by the mote, as practised in India, or, when the wells are sufficiently shallow, it is raised by the lever, as on the banks of the Nile and Euphrates.

The soil is of a rich alluvial nature, and yields, with little labor to the husbandman, a plentiful crop. From its loose nature it requires but little ploughing, and the instrument used is rude and simple. From Shah Bunder to Hagiabad the whole of the country is cultivated, yielding large crops of wheat, fruit, and vegetables. Melons are common, and onions, are reared in large quantities; plums, cherries, frequently fine apples, and dried fruits, are brought from the interior. The indigo plant is also cultivated here to a considerable extent.

Although the site of the town is low, and badly chosen, yet it does not, excepting at the close of the date season, appear to be considered unhealthy; but near the fort the air is said to be very salubrious. During the hot months many of the better classes from Bunder Abbas and Kishm resort here, when, in addition to its superior climate, they enjoy the luxury which its light and pure water affords, which can only be duly appreciated in such a country.

In the better parts of the town of Minaw the houses are constructed of rough stone, cemented together with mud. In the windows

talc is substituted for glass. A small open space serving for their cattle, and for various domestic purposes, is sometimes enclosed by a wall, but more generally a fence constructed with branches of the date palm; with the same material the lower classes construct their huts, which are afterwards covered over with a layer of mud.

We found the inhabitants civil and obliging, but very anxious to cheat us on every opportunity. I believe this feeling, which is common in other places along the Gulf, arises from an idea that we are ignorant of prices, or indifferent to the value of money. Some individual usually attaches himself to a stranger, reserving to himself the exclusive right of taking advantage of him. They are shrewd and intelligent, and this compensates in some degree for their extortion, as they possess considerable information, which they are very willing to impart, and are very useful to a visitor when walking abroad, by keeping off the crowd, or as messengers.

Gamrún, or, as it is now styled, Bunder Abbas, appears to have been a town of little importance until 1622, when Shah Abbas, assisted by the English, drove the Portuguese from the island of Hormuz, and transferred its commerce to this port. Here, instead of being carried in ships to Basrah and the northern ports of the Gulf, a very considerable portion of the imports from India and Africa were landed, and transported by means of caravans to the interior parts of Persia and the adjacent countries; so that Gamrún became for a time the sea port of Persia.

The English, Dutch, and French had factories here. Merchants from all parts resorted to it, and it seemed destined to attain the former opulence and splendor of Hormuz; but its commercial career was far more brief. Towards the close of the seventeenth century, the internal commotions and distracted state of Persia frequently interrupted the route for very long periods, and the current of the trade became diverted to the northern ports. It should still, however, be remembered that this route conducts by one of the natural passes into the heart of Persia; for when Bushire, a few years ago, remained for some time in a disturbed state, commerce found its way again into this channel: and if Bushire had not been speedily restored to peace, Bunder Abbas would very soon have recovered a considerable portion of its former importance.

Even at present the trade is not inconsiderable, and it is said to be still increasing. In 1827 the Imam of Muscat, to whom the port at present belongs, collected a revenue of from 8 to 10,000 dollars. Persian carpets, tobacco, and dried fruits, form its exports; and piece goods, Indian cloths, and China ware, constitute its prin-

cipal imports. The annual importation of these articles, at the same time was estimated at nearly three lakhs of Rupees.

The town is situated on a slope, which approaches close to the sea ; the houses are few and wretchedly constructed, and the people are mostly lodged in huts. They are a mixed population composed of Persians, Arabs, Kurds, a few Armenians and Bedouins. Their number, though constantly fluctuating, may be estimated at from 4 to 5000. Some portions of the English factory-house are still standing ; but that erected by the Dutch is in better repair, and still serves His Highness the Imam of Muscat as a residence during his visits to the port.

The tombs of the former European inhabitants are just without the town. In their vicinity there are some tanks, which were excavated with extraordinary labor by the Portuguese ; the length of the most extensive cannot be less than half a mile. These are intersected at right angles towards the extremity by two others, so that they assume the shape of a cross.

Between Gamrún and Linjah there is little on the sea coast of Persia to attract attention. The range of mountains extending from Jibal Shamál which is distant thirty miles from the sea, gradually approaches the shore to the latter port, where they are not more than three miles distant. The maritime plain throughout the whole distance is low and barren, though not without occasional spots of cultivated ground. Abreast of Laft the coast is fronted by swamps, thickly covered with mangrove jungle, and within this, close to the margin of the sea, stands the small village of Khamir. In this vicinity there are mines of sulphur, which are extensively worked, and the produce imported in large quantities to Muscat. Between Khamír and Linjah there are two small towns, one called Bandar Hallum, containing about 300 inhabitants, who trade in salt ; the other Kúng, where the Portuguese had formerly a small factory established, principally with a view to command the copper mines in its vicinity, which were worked by them.

Abreast of Basidoh the height of the coast range was ascertained, by trigonometrical measurement, to be 3478 feet above the level of the sea. Although the ascent is very laborious and difficult, it has been accomplished by several of our officers. Crossing over the maritime plain, which is here not more than  $3\frac{1}{2}$  miles in breadth, they found at the foot of the hills a mineral spring, the waters of which are highly beneficial for cutaneous eruptions, as well as in rheumatism, scurvy, &c.

Of the islands which, besides Hormuz, form the group situated in this part of the Gulf of Persia, that of Kishm is the largest, and indeed surpasses in size all the islands of this inland sea. Kishm stretches along the Persian shore, from which it is separated by a channel thirteen miles in (maximum) width, but contracting in the middle of its length to three. The channel is studded with islets, and bears in the new charts the designation of Clarence's Straits.

In its form Kishm beafts a striking resemblance to a fish, the town of the same name being situated at its head, which faces the eastward; Laft and the islands of Anjar to the northward and southward of either fin, and Basidoh to the westward, at the extremity of its tail. Its length is fifty-four miles, and width, at the broadest part, twenty miles. On the southern side, a ridge of hills extends from one extremity to the other, while the remaining space to the northward is occupied by arid plains and deep ravines. The greater part of the surface of the islands is sterile, and in some places incrustated with a saline efflorescence; but the most striking feature in its structure, is some singular shaped table hills, which occupy insulated positions in the plains. These are of a circular form, principally composed of sandstone, and are broader at the upper part than at the basis. Their average height is from 200 to 400 feet; their surface and sides worn into hollows by the weather give them the appearance of having been subjected to the action of a powerful stream, an illusion still further increased by observing the plains and the sides of the hills, which, in the form of banks, bound what seem to be the beds of deserted water courses. In a country where earthquakes are frequent, we might infer, from the general appearance of the whole, that these insulated masses denote the original level of the island, and that the plains have sunk in every direction around them. At Basidoh in March 1829, for six hours during the night, successive shocks were felt. The inhabitants were in great alarm, and even the cattle evinced symptoms of fear; nothing serious, however, occurred.

The northern part of the island is the most fertile, and on this account the most populous. The soil consists of a black loam, and on it is reared wheat, barley, vegetables, melons, grapes, &c. Dates are produced in large quantities; cattle and poultry are also reared, but, unless their crops fail them, the inhabitants are indifferent about disposing of the former. The whole number of inhabitants on the island may amount to about 5000. They employ themselves in fishing, in cultivating the soil, and in making cloth. They reside in villages and haulets scattered along the sea coast.

The only towns on the island are Kishm; (the largest), Laft, next in importance, and Basidoh.

**Kishm.** The town of this name is situated near the sea at the eastern point of the island, its site being remarkably well chosen. A wall flanked by turrets surrounds it, and affords the inhabitants security from robbers or pirates. Some of the houses are large, and, for this country neatly fitted up; the roofs are flat, and the apertures for light are partially filled with curious devices formed of a fine cement.

Kishm has the appearance of having formerly been of greater commercial importance than it is at present. Even when I first visited it in 1821, the bazar was abundantly supplied with vegetables of various kinds, fruits, apples, and pomegranates from the interior of Persia. Very good wine, and every description of dried fruit could be then obtained, as well as silk and cotton cloths, together with very fine carpets soft as silk, and of the richest pattern and dye. These latter we purchased at the rate of twenty dollars each; they were 6 or 7 feet long, by 3 feet broad. At this time the British force was encamped near the town, and the demand was in consequence considerably increased; yet the supply was in general fully equal to it.

Kishm is frequently visited by native vessels, which touch here for wood and water, or to engage pilots for the Kishm channel, and the town has, in consequence, a bustling appearance. A few bug-galas are constructed here with timber brought from the Malabar coast.

Captain Brucks computes the number of inhabitants at two thousand. In the plains to the westward of the town there are several patches of cultivated ground, interspersed with clumps of date trees. Our force encamped about one mile from the town, in a strong position, on an elevated tabular ridge, which presents a steep face on either side. The situation was found to be so hot and unhealthy, that, after losing several men from fevers, they were obliged to quit.

Laft, when in the possession of the Joasmee pirates, was a place of considerable strength, to which they resorted, and the tortuous nature of the channel and numerous shoals (then unknown) in Clarence's Straits rendered it very difficult to follow them. During the expedition under Colonel Smith and Captain Wainwright in 1809, these Arabs beat back, with considerable loss, a storming party, but surrendered when the vessels came close in, and hadbat-

tered their walls. The town is, at present in a miserable state. It is built on the slope of a hill, and surrounded by a wall.

Basidoh, in latitude  $28^{\circ} 39' N.$  and longitude  $55^{\circ} 22' E.$ , was formerly in the possession of the Portuguese, and the ruins of the town and fort which they erected, may be still traced. This station has been happily selected, for the British, after various attempts to locate in other spots, were compelled to abandon all, and finally to settle here; and after similar attempts to establish a rendezvous at other ports, the naval squadron became also finally stationed here.

On account of its salubrity and the local advantages it enjoys, this is the most eligible spot which could have been chosen in the lower part of the Gulf. An hospital and storehouse, a guard room, cooperage, &c. have been erected at the public expense. Five or six private houses, a billiard room and five-court, erected by subscription by officers of the Indian Navy, were soon after raised, and a very respectable bazar was subsequently established.

The few vessels now stationed in the Gulf, from being constantly employed in various parts of it, visit Basidoh less frequently than formerly, and the place is in consequence going to decay.

The bazar affords some scanty supplies from Minaw and Linjah; a few merchants, who have emigrated here from Bushire when the place was more flourishing, still remain. They contrive to increase their income, by hiring out jaded horses and asses to our seamen. Some Indian washermen derive a more certain profit, for within the Gulf, with the exception of Bushire, this is the only place where clothes can be washed well. Some Jews also reside here; they are principally goldsmiths and occupy themselves in making rings and bangles for the females.

Basidoh is scantily supplied with water. The wells dry up in April or May; and the few tanks, which are similar in construction to those of Hormuz, and have, it is supposed, the same origin, although kept in repair by the English, do not afford more than is sufficient for the station, and the ships fill up either on the opposite coast, or further up the channel.

Although nothing can exceed in barrenness the appearance of the country in the vicinity of Basidoh, yet there are several places, only a few miles distant from it, which often exhibit all the verdure of more fertile regions; such are the plains contiguous to Gorí and those near Dustagán. The former cover a space of eight miles in length, and three in width, and contain groves of the date palm, verdant plots of cultivated ground, and, after the rains, a luxuriant crop of high grass.

The few productions of this island do not differ from those to be found on the main; a few grapes are grown in wells, or the vines are permitted to climb around the branches of the Banyan (*Ficus Indicus*); a few mangoe trees are also found at Dustagán, but in no other part of the island. Salt is found on the southern side, rising up into hills, or formed into caves. In the centre of one of these caverns, about 50 yards in length, and 12 in height, flows a stream of water; and from the roof and sides hang stalactites of salt, which are sometimes 18 or 20 inches in length. The surrounding plains are covered with a saline crust, which the natives collect and convey to Dustagán. Towards the centre of the island there is an insulated rock about 300 feet in height, which is steep on every side, and seems to have formerly served the purpose of a retreat to some bands of pirates or robbers. The summit can only be gained by climbing up through a narrow aperture resembling a chimney. Some of our officers who ascended by this way, found at the top the ruins of several houses and two tanks.

The natives have a tradition, that this singular spot was formerly taken possession of by the crew of a Portuguese ship wrecked on the island, who for a long time resisted the attempts of the inhabitants to destroy them.

Sandstone appears the predominant rock on the island. On many of the arid plains in the centre of Kishm are found fragments of Mica, varying in size from 3 or 4 inches to even a foot square.

Good hunting is obtained in several parts, and a small and very beautiful description of antelope is found during the day on the plains. At night they retreat to the hills. They are very shy, and, in order to give the greyhounds any chance of success, a party must be stationed to turn them from the hills, for which they invariably make upon the slightest alarm. They are sometimes taken after a run of two or three miles, completely tired and unable to proceed further; but they more generally escape. I have known them in the former case to be taken alive and unhurt, the dog standing over the poor animal, but unable from fatigue to harm it. Their flesh in the cold weather is much esteemed, but in the hot season it is lean and tasteless. Hares and small rabbits are also found on this island. Jackalls and foxes afford occasionally a good chase, but, as they are favored by the country, they more frequently take to earth. Camels, and asses are employed as beasts of burthen; in the rutting season the former are very savage.

The principal birds are vultures, cranes, grey partridge, hawks,

pigeons, the kingfisher, uppoo, and jay. There are several others remarkable for the beauty of their plumage. Several varieties of fish are caught on Basidoh bank; prawns, lobsters, and large crabs are also abundant. There are several varieties of snakes; some of the most venomous kind. I have seen death follow in two hours after the person had been bitten.

From the irregular outline of the island, and the existence of numerous banks and islets, the direction of the channel which separates Kishm from the main is varied and tortuous.

Commencing from the westward, about midchannel between Basidoh and the main, there is a sandbank with about 10 feet water on it. Across this, towards the Persian coast, you carry a depth of 2 or 3 fathoms; but towards the Kishm side, the channel varies both in its nature and depth. In some places you have soft mud over hard rocks, in others a mixture of clay and mud very tenacious, and in other parts a clear bottom of sand. Proceeding up the channel towards Gorún the deepest water is near the island, and its depth is indicated by the appearance of the shore; if the cliffs rise up boldly from the beach, the water is deep close to the shore: on the other hand, where the plain slopes down to the sea, extensive mud flats run off it to a considerable distance. Beyond Gorún, approaching towards Laft, two channels branch forth; one near the Persian shore used by ships, and another, although more narrow and winding, preferred by boats, on account of its being free from rocks or banks; the space included between these two channels is nearly blocked up with mud flats, dry at low, and but partially covered at high water. Narrow streams intersect these flats, and form them into groups of islets. These islets are covered with a dense jungle of mangrove trees; and the lively green of their foliage, in a country so destitute of vegetation, presents a refreshing and pleasing effect.

During our stay amidst these islets, we were apprehensive, from the dense nature of the jungles, and the thick fogs which we observed hovering over them, particularly after sunset, that severe sickness would have prevailed amongst us; but notwithstanding that we were three weeks engaged in surveying this part of the channel, suffering much, though in the winter season, from exposure and fatigue, we had not a single case of fever.

Beyond Laft the jungle disappears, but for about 16 miles the channel continues equally intricate: from this point it runs along the Kishm shore, and eventually opens out into the Gulf of Hormuz where all is clear.



There is a point of some interest connected with the set and direction of the tide in this channel; the flood enters at both extremities of the channel, and meets at Laft, where the rise and fall is about 14 feet. This affords great facility in navigating the straits, for a vessel quitting the town of Kishm with the first of the flood may reach, and start from, Laft at high water, and have the whole of the ebb tide to carry her to Basidoh.

The Island of Anjar is situated on the south side of Kishm, opposite to the town of Laft, which stands on the northern shore. This island was formerly inhabited, but since the destruction of the town by the pirates it has been deserted. Vessels occasionally seek shelter here from northwesterly winds. Water also can be procured from wells and reservoirs situated near the anchorage.

A ruined mosque, which stands near the site of the former town, is still conspicuous. We found its geographical position to be, latitude  $36^{\circ} 41' N.$ , longitude  $55^{\circ} 0' E.$

The island is formed of bare rocks, and has the volcanic appearance which is commonly observed in the other islands of this Gulf.

About 24 miles to the south of Basidoh, there are two inhabited islands, called the Great and Little Tomb. The former is well stocked with antelopes, and is much resorted to by the officers stationed at Basidoh, for the purpose of hunting. In the winter months the island is well covered with grass, and the water is very good.

Larek is the last island to be mentioned. It lies in latitude  $26^{\circ} 53' N.$ , longitude  $54^{\circ} 23' E.$  It is of a volcanic character, and in size, as well as in the coloring of its strata, is very similar to Dalmah, one of the islands near the Arabian Coast, called by us Maud's Group.

A rocky ledge, extending to the average width of half mile, surrounds Larek; beyond that the water suddenly deepens over a bottom of rocks and sand to 18 or 20 fathoms. The island has neither harbour nor any secure anchorage near it, so that from whatever quarter the wind may blow, the sea rises and breaks with much fury over the rocks which girt its shore. It is therefore highly dangerous to land in unsettled weather, and for these reasons Larek is rarely visited.

We found it inhabited by a few fishermen, who, to the number of about 100, reside in wretched huts, within the walls of an extensive fort. They live together as one family, and are a poor and insolated race, bearing some resemblance to the tribe (to be described hereafter) who reside in the vicinity of Ras Masandam, with whom, and

in this they are singular; they maintain a friendly intercourse. They have a great aversion to mixing with their neighbours, and rarely ever visit the town of Kishm, though only six miles distant. They subsist on fish and dates. No part of the island is cultivated, and the few cattle they rear for the sake of their milk, partake in general of the same food as their masters.

I shall now conclude this sketch with a brief description of the land about Ras Masandam, and of the inhabitants who are found residing on the shores of the deep inlets and coves in its vicinity.

Ras Masandam lies in latitude  $26^{\circ} 23' N.$ , and longitude  $56^{\circ} 35' E.$  It forms the outer point of an island bearing the same appellation, but the true promontory of the coast is called Ras Gabr Hindí, or Ras el Jibal. From this the island is separated by a deep but narrow channel. The Cape is about 200 feet in height, and rises abruptly from the sea. It is composed principally of basalt, which gives it a black and gloomy aspect.

On both sides of this promontory the coast line is indented in a most singular manner into deep coves and inlets, extending as far as Ras Shaik Masúd on the western side, and to Ras Huffar to the southward. The two most remarkable of these inlets are named in the new charts after Mr. Elphinstone and Sir J. Malcolm: the former inlet lies on the western side, and runs in a most tortuous course for nearly eight miles. At the bottom it is separated from Malcolm's inlet, which lies on the opposite side of the promontory, by a mountain ridge which is 500 feet high, and difficult to ascend, but only 100 yards broad at the summit.

The depth of water in the coves varies from 30 to 40 fathoms in the centre, shelving towards the rocks on either side over a bed of branching coral and fine sand. The water is exceedingly clear, and the various kinds of rock fish may be seen sporting amongst the coral in 8 and 10 fathoms depth close to the shore. At the entrance, and inside the coves, there are several curious rocky islets; some of them with deep water close to their base.

The hills, in general, rise perpendicularly from the sea, and average in height from 200 to 800 feet; they are extremely rugged and barren, and in some places deep caverns have been formed at the base by the action of the waves. They are principally composed of basalt and granite, in a state of discomposition, which renders it dangerous to ascend in many places, as, by the slightest pressure, large masses of rock are detached. Quartz is met with very commonly,

and likewise slate-stone. Some stunted shrubs and grass grow on the side of the hills, and likewise the senna plant;

Khasab bay (the fort in latitude  $26^{\circ} 53' N.$ , longitude  $66^{\circ} 20' E.$ ) is the only one of the inlets in this vicinity which differs sufficiently from the others to merit a separate notice. Nature appears less forbidding in this spot, for at the bottom of the bay there is a plain of considerable extent, which is covered with a rich soil, and yields a tolerable crop of wheat, barley and onions, besides dates; and the verdure, which is every where surrounded by naked rocks, produces a pleasing effect.

The fort is large, and strongly built of the usual form, with turrets at the corner; but it is considerably out of repair, and will soon fall into ruin. Good water is plentiful, and easily procured; and we obtained some cattle and other supplies from the natives.

Fish are procured in great abundance in all the coves: mullet, sir fish, and the different kinds of rockfish, are the most common; oysters are found attached to the cliffs, and are very good. The natives procure a beautiful large conch shell from a great depth, and eat the fish when cooked.

The isolated condition of the inhabitants of these hills and coves, has rendered them remarkable for their primitive state of ignorance and poverty, which is, however, compensated in a great measure by their love of home and general contentment. They are principally found residing in the little sandy bays situated at the extreme end of the inlets, living in small stone huts, and surrounded by a few palm trees; they subsist on fish, barley cakes, goat's milk, and dates. They are badly clothed, but their dress is not otherwise remarkable. They profess the Mahomedan religion, and practise its laws as far as they understand them. They speak Arabic, a corrupt jargon certainly, and difficult to be understood even by Arabs; but I do not believe that they have a distinct language, for when Mr. Wellsted put the question to the Imam of Muscat, he decidedly said they had not; that he had seen a few of them at Muscat, but he believed it was very seldom that they ever left their native hills, and they were a singular, but a poor and inoffensive race.

It is impossible to say what their number may be, as they shift about at different seasons, and sometimes quit their valleys and live on the summit of the hills. At a place called Limah, we found them residing in natural excavations on the side of a steep hill, the front part only being partially built up with loose stones. It had a most singular appearance. The caverns were in ranges one above the

other ; the children were usually seen tied with cords, to prevent them tumbling down the precipice ;

They are too ignorant to be ever inquisitive ; and when some of them were induced to come on board, idiotic surprise for a moment, and indifference immediately afterwards, formed the principal characteristic of these poor people. Watches, pictures, and looking-glasses were shown to them, which they had evidently never seen before ; but the chain cable and the pigs were the only objects that fixed their attention. Their interest in the cable arose from the following circumstance. We anchored in the first deep cove, about 10 o'clock at night, in 40 fathoms, and the chain in running out of the hause certainly made a noise, which reverberated amongst the hills to such a degree that the inhabitants fled in terror with their wives and families, and could not be induced to return again, until the cause of their alarm was explained to them.

The natives are very indolent and slovenly, and never work more than is necessary for their maintenance : fishing and making nets are their only occupations. The women do the house work, and milk the goats, which ramble about the hills. We conceived at first that their goats were wild, indeed they were so to us, and afforded some good sport : however, it was explained by the natives that they were individual property, and we paid liberally for our mistake. We found the people exceedingly civil and good natured, and they seldom allowed us to leave a village without inviting us to feed on dates and milk.

The men possess the faculty of pitching the voice to a remarkable shrill note, which can be heard over the hills and valleys to a distance which would be considered incredible.

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*IV.—Remarks on the history, of some of the oldest races now settled in Bombay; with reasons for supposing that the present island of Bombay consisted, in the 14th century, of two or more distinct islands.* By R. X. Murphy, Esq.

The present numerous population of Bombay is composed of a great variety of castes and races, distinguished from each other by very marked characteristics; and affording, could the successive periods of their settlement be traced with certainty, a series of living records, indicative of events in its political or commercial history, that have gradually tended to raise it from a barren spot to its present wealth and importance. Thus, for instance, the great influx of Parsee inhabitants may be set down as cotemporary with the decline of Surat, and the transfer of its trade to the port of Bombay; the Brahmin population commenced with our relations with the Peishwa, received a great accession at his overthrow, and has been ever since on the increase; the Persian, Arab and Khandaharee settlers mark the epoch of the trade in horses; and perhaps the settlement of the Camatees might be traced to the expedition to Egypt or some similar event,\* which brought into Bombay a numerous body of officers and their retainers from the Madras presidency. Were this principle to be thoroughly followed up with every section of the population, making use at once of their records, their traditions, and their usages, searching into the signification and origin of the names of localities, and testing all the information thus obtained by a comparison with the Portuguese, Mahomedan and English authors, that have treated on contemporary subjects, the result might be a history of this island and of its dependencies, particularly Salsette, of very considerable interest, and perhaps of not inferior accuracy. Upon the above principle I have endeavoured to trace a general outline of the history of the oldest races now in Bombay, using *language*, in the first instance, as the medium for ascertaining those races. Among the various dialects of Mahratta spoken in Bombay, there is one peculiar one, which, as it is that spoken by the Native Christians of Salsette, Mahim, Matoonga and Mazagon, must have been the dialect of this large body before their conversion from Hinduism by the Portuguese; for the Portuguese could not have introduced so peculiar a dialect, having nothing European in its character, into

\* I do not pretend to fix the particular event, but merely to indicate the probability of a connection between each settlement and some historical fact.

the language of their converts; and since their conversion the latter have lived as a distinct body, and come into contact with no other influence likely to effect it. The fair presumption, therefore, is, that the dialect spoken by the Native Christians of Bombay and Salsette, was the dialect spoken by a large portion of the population of these islands before the arrival of the Portuguese; and we are thus prepared to look for the oldest Hindú inhabitants among those castes whose language is still most strongly tinged with this peculiar dialect. Accordingly on applying the principle, we find this dialect entering very largely into the language spoken by five distinct sections of the population, and every step we take, in tracing the traditional or recorded history of these five sections, confirms us in the conclusions drawn from their speech, and marks them as the oldest unconverted settlers in Bombay. These are —

- 1 The Colees or fishermen.
- 2 The Bhongules, Bhundarees or Tody-drawers.
- 3 The Pulsheas, Joshces or Hindú doctors.
- 4 The Pathany or Pathary Purvoes.
- 5 The Panchkulseas, Wadavuls or Carpenters, which caste also take care of all the cocoanut gardens on the island.

The evidence of language above adduced will fix these races on the island previous to its occupation by the Portuguese; but that they were so previous to any Mahomedan settlement, even so early as the commencement of the 14th century appears extremely probable from the following two circumstances.

1st. The first Mahomedan invasion of the Deccan took place in 1292, when Allah-ud-deen defeated the Hindoo prince Ramdeo Jadow near Deogiri, or Deogurh, the modern Dowlatabad; and the first extension of the Mahomedan power to the sea ports of the Concan in 1318; when the Emperor Moonsharik I. having overcome and beheaded Hirpal Deo near the same city, "ordered his garrisons to be extended as far as the sea." Now both these circumstances, the defeat of Ramdeo Raja by Allah-ud-deen, and the extension of Mahomedan power to Mahim, Salsette, and other places on the shores of the Concan, are specifically mentioned in the MSS. histories of the Pathany Purvoes, which I have examined; and the latter event is therein stated to have occurred when at least four of these five races were settled on Bombay and Salsette.

2d. A Sanscrit legend in my possession entitled *Walkeshwur Mahatma*, or "the greatness of Walkeshwur," which contains some

account of the temples on Malabar Point and the old Moombadevee temple,\* describes the Hindoo inhabitants of Bombay as suffering in their religion, from the tyranny of the same Moombarik E, shortly before the erection of that temple, a circumstance which shows that something like a superior grade of Hindoo society existed at that period on the island; for mere Colees could scarcely have required such a temple, or have been very sensible to religious persecution.

Having thus fixed these races on Bombay at a very early period, I shall proceed to notice some circumstances which distinguish them from the other castes now composing the Hindoo population, and which are necessary to render the MSS. histories intelligible; but I should first observe that a very large proportion of the two first races, the Colees and Bhundarees, are now merged in the Native Christian population of Salsette and Bombay, many of whom still retain the Hindoo costume, some their original surnames and occupations, and all their original dialect. The first remarkable characteristic which forms the bond of connexion between the five races is this very dialect, already noticed. They all speak Mahratta, but a Mahratta which is more or less distinguished in all by peculiarities which exist in their full barbarity and harshness among the Colees alone, of whom, whether Native or Christian, it is the natural language. Hence it is commonly termed the "Colee bhasha," or Colee language; and from this circumstance it may be fairly inferred, that this race was the first, and, for a considerable time, most numerous, on the island; and that the other four races were subsequent settlers, who, by long residence amongst them, gradually acquired a dialect approaching to theirs, though not quite so harsh or so corrupt. This becomes more strong from the fact that the same dialect, though prevalent among the Colees in other parts of the Concan, does not exist among any class, however, low or illiterate, in the interior. Among the other four classes this characteristic is less marked; and among the Pulsheas, Purvoes, and even the Panchkulseas, it is beginning to grow perceptibly more faint. The influx of Brahmins from the Deccan and Concan, the publications and Mahratta schools of the N. E. Society, which have established a correct standard of language, and the pride of caste, which, of latter years, has led all the educated classes to throw aside their barbarous idiom

\* The old temple of Moombadevee, from which the name Bombay was probably derived, was on the esplanade, and removed about 80 years ago to its present site.

and are the purest Brahminical dialect, have produced, even in my own recollection, a very great change in this respect. Yet the characteristic still exists among the older branches of these races, it is very perceptible in all their writings of an old date, and I am assured that thirty years ago it deeply infected every family among them.

Of the Bhundarees the most remarkable usage is their fondness for a peculiar species of long trumpet called *Bhongulee*, which, ever since the dominion of the Portuguese, they have had the privilege of carrying and blowing on certain state occasions. Fryer, in a letter written from Bombay between 1672 and 1681, describes the Bhundarees as forming a sort of honorary guard or heralds to the Governor; and even to this day they carry the Union flag, and blow their immense trumpet before the High Sheriff on the opening of the Quarter Sessions. This singular privilege receives considerable illustration from a fact stated in the MSS. histories, that, shortly before the Portuguese occupation of Bombay, a race of Bhongulee or trumpeter chiefs seized upon and maintained the government of Mahim, to which Bombay and Salsette were then subject. This, then, would appear to have been a dynasty of Bhundaree princes, whose humble representatives are still to be seen blowing their trumpets, and carrying their standards in the pageants of another royalty.

The Pulseas or Joshees call themselves Brahmins, but no other Brahmins will eat with them, or admit their title to the name. Yet, that for a long period they were in Bombay acknowledged as such, is placed beyond a doubt; for Ragonath Joshee is in possession of an order from the Recorder's Court, dated 70 or 80 years ago, and bearing the Court's seal, from which it appears that they were then the only officiating Brahmins recognized by the British authorities in Bombay; and to this day several Purvoo families employ individuals of this caste as priests in all their religious ceremonies.

The Pathany Purvoes claim descent from some Solar Lunar Xetry kings who fled from Pyetun, or from Guzerat, and, seizing upon a portion of the Concan, established a principality, the capital of which was Mahim on this island. They disown the Panchkulseas, or carpenters, as equals; but generally admit that the latter were formerly connected with this principality in some inferior capacity.

The Panchkulseas likewise claim a Xetry origin, and an equality with the Purvoes.

The Brahmins treat the pretensions to caste of all these three classes with contempt, maintaining that they are all sprung from one Shoodra



origin. They allow them, however, generally to have settled in Mahim some centuries ago, and, under Bimb-Raja, governed Salsette and a portion of the Concan. The MSS. to which I am about to refer profess to be histories of this dominion, and from them it appears that there were two capitals, one Mahim, and the other Prutappooree, in the district of Merole in Salsette. There appears, indeed, to have existed a kingdom still more anciently established in the latter island under the Naiks, whom these new settlers dispossessed; and of this dynasty must have been that Raja mentioned by Grant Duff (on the authority of a grant engraved on a copper plate found near Tannah) as having reigned in or near Salsette in A. D. 1018, claiming descent from the kings of Tagar. Of the inscriptions from stones found in Salsette, forwarded to me by Mr. Wathen, one is the fragment of a grant, in the village of Ootun in Salsette, from a prince named Keshee Deo Raja in the year of our era 1047; and the others are similar grants in Ootun and Veoor from Huripal Deo in A. D. 1099, and A. D. 1100. These two last dates, however, there is reason to believe, are incorrectly copied, for there is a difference of ten years between the names of the years as they stand in the cycle [Sumvutsur] and the figures; one of them, that dated A. D. 1099, asserts that there was an eclipse of the moon on the day on which it was written. All three name the Rajas as the descendants of a long line of ancestors.

I shall now proceed to give a short abstract of these MSS. which profess to give an account of the kingdom founded by Bimb Raja at Mahim, in which, although the Pathany Purvoes chiefly figure, the other four races are necessarily introduced, though in a variety of ways in the different MSS.

The first MSS. and that which I have most thoroughly examined, is a *Bukur*, or prose history, written by Junardun Gunesh of Mahim apparently very shortly after the capture of Bassein by the Mahrattas in 1739. It is addressed to Anuntā Crishna at Moongy Pyetun,\* and opens as follows:

“In obedience to the commands you wrote me, to send you a history of the first settlement in the Concan of the Solar and Lunar Rajas, the Pathany Purvoes, and what persons became successively rulers over their territory, I now write the following details.”

The narrative commences with the defeat of Ramdeo Raja by Allah-ud-deen at Pyetun, or Deogiri, about A. D. 1294—his repossession

\* One copy says at Oude, but this would seem an error.

sion of his kingdom, and the obstinacy of his son Keshow Row in holding out after his father's defeat. In all these circumstances, notwithstanding some confusion in the mode of narrating them, the main facts agree with Dow and Grant Duff, and the date given is within two years of that assigned by the former : but while these authorities, as well as the common traditions of the country, assign to Ramdeo Raja a Shoodra descent, and the Shoodra surname of Jadow, by which his supposed descendants, an influential family of Deshmookhs, are still known, the MSS. on the contrary, gives him a pedigree from the Solar Xetry kings, and carefully suppresses the surname of Jadow, substituting that of Rané. Should therefore the Pathany Purvoes be eventually established as the legitimate descendants of this prince, which they claim to be, though their title to a military and ruling lineage will be thereby made out, the same circumstance will overthrow all their pretensions to a pure or even mixed Xetry origin, and replace them as the offspring of a peculiar section of Shoodra chiefs, in whom three centuries of supremacy followed by two of civil and sedentary employment, have obliterated their original gross and robust physical characteristics, and produced a superior mental and more delicate bodily development.

The second son of this Ramdeo Raja is stated in the MSS. to have been Bimb Raja, who, during the power of his father, had been vested with the principality of Oodeypore in Guzerat. He appears subsequently to have been fixed at *Ahinul-wada*, some other locality in Surat with which I am unacquainted, whence, after the defeat of his father, and the general advance of Mahomedan domination to the south and west, he was forced to emigrate in A. D. 1295, with twelve other Solar princes, 64 Lunar Xetry families of distinction, and a large body of military followers. With these he advanced to the south, and, dispossessing the Naik princes, seized successively upon Chiknee, Tarapoor, Asseree, Keluve-Mahim, Thul, Saisette and Mahim, which he consolidated into a principality, divided into 15 mahals or districts, containing 444 villages, portioned out under the administration of his principal followers. The names of twelve Solar princes and their families, and those of the 15 mahals or districts, are stated at length in the MSS. Mahim is therein described as a barren island, inhabited by Colees alone, but so pleasantly situated, that Bimb Raja had it planted and colonized by his followers : the principal families in his train built residences, and laid out gardens in it, in imitation of their chief ; and thus were formed the rudiments of a settlement which shortly became the

capital of a flourishing little staté. The names given to Mahim in the MSS. are "the island of Mahim," or "Muhikaputee," "Prubharuttee," and "Bimbusthan," or "the place of Bimb." From the various chiefs who settled there, or received subordinate administrations in Keluve-Malliof, Choul, Bassein &c. the present Pathany Purvoes are alléged to be descended, and hence to have borne to this day the surnames "of Keluve-kur," "Mahimkur," "Wasseikur," "Choul-kur," &c.

On the death of Bimb Raja, his son Prutap Shah succeeded him and built the other capital, Prutappooree, in Merole in Salsette; during the latter part of his reign he became involved in a war with Nagar Shah, a chief of Choul, whom this MSS. alleges to have been his brother-in-law; and who, after repeatedly defeating him and his allies, at length deprived him of his kingdom, and reigned in Mahim and Salsette in his stead. The chiefs who had aided Nagar Shah to this elevation, were not rewarded by him according to their expectations, and in the feuds which followed some of them invited the Mahomedans to their aid—the result was a Mahomedan force sent to Salsette and Mahim, which captured and slew Nagar Shah, and established the sovereignty of their master in these places, but, as it seems, without making any large settlement at the time on this island. We next have a dynasty of Bhongule, or Trumpeter, chiefs, whom there is every reason for believing to be Bhundarees, since they retain the Bhongules-trumpet and the name of Bhongules to this day, and still have some privileges in public pageants, which seem the faint shadows of former power. The Mahomedans are described as overthrowing the Bhongules and again becoming ascendant; and I am led to suppose, that on the arrival of the Portuguese, the Bhongules, or Bhundarees, sided with the latter for the expulsion of the Mahomedans, and thus, perhaps, retained those privileges to which there has been no interruption since the dominion of the Portuguese. The Mahomedans, after the defeat of the Bhongules, are represented as gradually mastering the whole Concan; and Bahadoor Khan was governor of Bassein district, when the Portuguese, luring him with a hope of gain, established their factory there, which they very soon changed into a fortress and powerful military hold. The treachery, cruelty, and conquests of the Portuguese are described, and their occupation of Bombay, Salsette and Mahim, is mentioned as closing the existence of the state founded by Bimb Raja. The transfer of Bombay to England in dowry is cursorily mentioned, and the remainder of the MSS. is filled with

the rise of the Mahratta power, the struggles between the Mahrattas and Portuguese, and the famous siege of Bassain, whose fall in 1739 A. D. after a resistance of three years, closes the record.

In the above document the Colees are acknowledged as the first inhabitants of Bombay or Mahim; but neither Pulseas nor Panchkulseas are introduced throughout under those names. There are a few Brahmins mentioned, who probably were Pulseas—and the planting of the gardens seems to indicate the Panchkulseas or *Wadavuls*. The existence of gardens of cocoanut must have soon introduced Bhundarees; and these must have been very numerous on the island though it appears they were aided by the Bhundarees of Choul, to have assumed the command of the island, and sustained a prolonged contest with the Mahomedan detachments.

The second MSS. is also a prose *Bukur*, coinciding in almost every particular with the first, but containing, in addition, a list of villages under the Bimb dynasty, with their products in kind and specie, and the application of the revenue. A comparison of these with the present, would be interesting, if the identity of localities can be ascertained.

The third MSS. is the *Bimbakhyā*, or History of Bimb, in a sort of jingling rhyme called *Oyen*, or “strings of verse,” which is the only, or at least the most common, sort of poetry applied by the Mahrattas to narrative. This book was forwarded to me by Mr. Wathen; and while it confirms both the former accounts in most particulars, and opens and close at the same periods, it contains a few particulars, which are either additional or in contradiction to them. The first settlement is asserted to have been made at Walkeshwur, whence Bimb Raja removed to Mahim, where he fixed his capital. A race of Bramhins is introduced, to whom he gave the village of Pulshea-vulee or the “Pulseas’ range,” in which we at once recognize the Pulseas. The Panchkulseas are also introduced as Lunar Xetrys, who were degraded and forced to become *carpenters* for having admitted to their caste and eaten with a Colee, who had assisted in seizing their enemy in the water.

The fourth is a prose compilation, for it seems to be a collection of papers by very different hands; some of them evidently Brahminical—also sent by Mr. Wathen. One of these papers maintains that, so far from having any claim to be the legitimate descendants of Bimb Raja, whose existence and power at Mahim it acknowledges, they are the offspring of an illicit connexion between one of the Brahmin ministers at his court with a female of the family of Bimb,

daughter to the Rana of Maoolee ; and that hence they were called "Purbheej," or "the seed of a stranger." If the inscriptions, however, sent by Mr. Wathen, be genuine and correctly decyphered, they overthrow this assertion, as one of them, dated two centuries before the arrival of Bimb, is stated to be written by "Velgee Purvo," or "Purbhoo," a proof that the name of the caste existed long before this frail daughter of the Manolee Rana was born. Of the previous settlement at Walkeshwur, the gift of Pulsea-vulee to the Pulseas, and the degradation of the Panchkulseas, nearly the same account is given in another part of this compilation as in the poetical history. The war between Nagra Shah and Prutap Shah and its results are also similar ; but with this difference, that this Chief of Champavutee (Choul) is asserted to have been a *Vuishy* or Banyan, (very probably meant for the caste of *Shetyas* or military Banyans,) and not a brother-in-law of Prutap Shah ; the course of Raja Bimb's emigration is also differently laid down, and his relationship to Ramdeo Raja omitted. He is stated to have come from Champaneer to Moongee Pyetun, and thence to the Concan, to seek his fortune as a military adventurer. In another part of this compilation a very different admission is made from that given above regarding the origin of these races. Both Purvoes and Panchkulseas are denominated true Lunar Xetrys, and the latter received the name of *Wadavul*, or gardener, merely from having given up war, and taken to the cultivation of the cocoanut gardens.

There is a fifth collection of papers at Bassein which I have not yet seen, but which, I am informed, go to establish the following facts. That Bimb Raja was a Shoodra chief, who conquered Salsette and a portion of the Northern Concan, and established a state, of which Mahim was the capital ; that his followers after their settlement divided themselves from circumstances into three classes, which have since remained separate. The most instructed acted as priests to the rest, and are the progenitors of the Pulseas ; the higher military chiefs maintained possession of all the honorable and profitable posts in the government, and retained to themselves exclusively the title of *Prubhoos*, *Prubhoos* or lords, from whom are descended the Pathany Purvoes, and the humbler followers and dependents were settled in the gardens as cultivators and carpenters, the forefathers of the present Panchkulseas. A stone at Mahim inscribed with Sanscrit characters, is said to exist in one of the cocoanut gardens, and to throw some light upon these points.

There is evidently a great deal of confusion and discrepancy in

these accounts; and there are, in all, long intervals of time inadequately filled up. Yet upon a few leading points they nearly all mainly agree.

Whether these three races were originally three, or one only, which acted on the little theatre of the Mahim State, the same drama of segregation into priests, warriors, and cultivators, which had already been performed on the larger stages of Egypt and India, and towards which all new societies have perhaps a tendency, is still uncertain. But that Bimb Raja did form such a settlement at Mahim about the date of Allah-ud-deen's invasion of the Deccan, and that these three classes were more or less connected with that settlement, which, though falling under the power of different Chiefs and races, always retained Salsette as its principal domain up to the decline of the Portuguese, seems to be a point in which all, however in other respects conflicting, clearly agree.

The only historical conclusions which we can as yet deduce with a very tolerable degree of probability, are the following.

1. That previous to A. D. 1295, Bombay was inhabited by Coles only, who are, as far as yet appears, its first inhabitants.

2. That about A. D. 1295, Bimb Raja took possession of it, and planted it, chiefly with cocoanut, probably introducing Bhundarees at the same period.

3. That the Pathany Purvoes, Pulsheas and Panchkulsens, are the descendants of his followers, whose language has, by long residence among a population of Coles, acquired a strong tincture of their dialect.

4. That his immediate successor was dispossessed of his authority by invaders from Choul, who, if not his own kindred, were of the Shetya or military Banyan caste.

5. That these were subdued by the Mahomedans.

6. That after this period Mahim was ruled by a race of Bhongule or Trumpeter chiefs, who were, in all probability, Bhundarees, but who sunk the latter name, and assumed the more warlike term of Bhongule (still applied to them) on attaining dominion.

7. That the Bhongule or Bhundaree rulers were again subdued by the Mahomedans, but that at the arrival of the Portuguese they were either once more in power, or assisted the invaders against the Mahomedans; and thus retained the privileges, which they have ever since claimed and exercised, of blowing their large trumpet, and carrying their standards in all royal pageants and processions, as

described by Mr. Fryer in 1672, and still witnessed at the opening of the Quarter Sessions.

Thus we shall have the following races as successively dominant in Bombay between 1290 and the present era.

1. The Colees.
2. The ancestors of the Pathany Purvoes, Pulsheas and Panchkul-seas.
3. The invaders from Choul of disputed caste, but probably only a different branch of the last.
4. The Mahomedays.
5. The Bhongules or Bhundarees.
6. The Mahomedans.
7. (Probably) the Bhundarees or Bhongules again.
8. The Portuguese.
9. The English.

But this is merely an outline, which it will require more materials, and a more leisurely examination of them to fill up correctly.

The want of a good map of Salsette has hitherto prevented me from attempting to verify the names of places contained in the above MSS. One conclusion, however, I was led to by reading the two first, for which I was at the time quite unprepared, namely, that the present island of Bombay formed in the year 1295 A. D. at least two distinct islands — for *Mahim* is mentioned as a *distinct island* of itself, and Bombay as if it were altogether another place. This inference, already strong on my mind from these MSS. has been strengthened by finding a similar supposition advanced in a note to Colonel Briggs' *Mahomedan Power in India*, of which I was quite unaware till pointed out to me by Mr. Bell, of the N. E. Society. I have since examined the native names of localities in Bombay, and endeavoured to trace their origin, and the result is all in favor of the above conclusion. The neighbourhood of the gaol is termed *Omer-khadee*. This word *khadee* is always applied to salt water creeks nearly dry at low, and covered at high water : thus the Colaba ferry and the various estuaries on the island at Mahim, Mazagon, &c. are all called *khadee* ; and on enquiry I find that it is the common tradition in Bombay, that up to the time of the wall built to keep out the sea, upwards of 80 years ago, mentioned in Dr. Lind's Essay, as quoted in "Ive's Voyage to India," the sea at high tide flowed from the west up to this point, laying under water the present Bhen-dy Bazar. I find also near the present temple of Moombadevee, a

place called Pay-dhoonee, or the place for "washing of feet;" and of this locality the old inhabitants tell me, that the men and cattle coming into Bombay from Salsette and Mahim used to wash their feet in a shallow stream of salt water, formed here by the tide from the west. What is still a more curious, and an equally authenticated, fact, is, that the Hindoos formerly visited Mahaluxmee *in boats*, embarking at Pay-dhoonee, and sailing over the present Camatapoor. If the water at so recent a period flowed so far to the southward, its northern incursion must have been in proportion, and this would bring it over all the salt batty ground as far as Colonel Dickinson's house. There would thus be left a very narrow strip of land uncovered between Col. Dickinson's and the estuary at Mr. Owen's, and this is probably the point where four or five centuries earlier the tides met and divided the island; for the high range of land between Oomer-khrdee and the harbour render a junction there very improbable.

There is, however, another mode of intersecting the island, namely, supposing the water of the sea to have flowed *longitudinally*, from the flats, across the bund which at present connects Mahim with Sion, thus cutting off Mahim from Sion and Mantoonga: this, however, will not invalidate the statement of the tide flowing as far as Oomer-khadee and Pay-dhoonee, which is well established; and it is not impossible that both suppositions are correct, and that the present island consisted originally of four, which have gradually been united into one.

The accompanying map will illustrate my meaning on the first hypothesis.

[The map alluded to was handed into the Society, but its publication was delayed in the hope of a better being procured: the matter appears afterwards to have fallen aside. A map has been constructed from actual survey and documents of old date in the office of the Collector of Land Revenue, illustrating and verifying much of Mr. Murphy's theory; it will be found at the conclusion. The portions indicate the individual islands out of which the first Island of Bombay (whose contour is indicated by a dotted line) must have originally been formed. G. B. Secy.]



**V.—Memoir on the Gulf of Akabah and the head of the Red Sea.**  
By Lieut T. G. Carless, I. N. Assistant Surveyor.

The following account of the Gulf of Akabah, a branch of the Red Sea hitherto almost unknown, is drawn up from a few notes taken during the survey of that place by Commander Moresby, of the Indian Navy, in 1833; and, as the extensive bay outside the entrance is in a great measure connected with it, a short description of its shores, islands, and inhabitants, is also given. Although the most favorable season of the year was chosen for ascending the Gulf, the winds, especially in the lower part, blew with such violence, as frequently to place the vessel in situations of great danger; and it was not until after several attempts had failed, that we succeeded in reaching its upper extremity, where a secure anchorage being fortunately discovered, our operations commenced under rather more favorable circumstances than had at first been anticipated. The difficulties encountered at the outset from bad weather and other causes, naturally made us anxious to complete the survey before the stormy months arrived; and as it was necessary to proceed as rapidly as possible in order to effect this, little time could be spared from more important duties for obtaining information concerning the country and its inhabitants. We were also frequently prevented from extending our researches when opportunities did occur, by the hostile disposition evinced on several occasions by the natives, who are noted throughout the upper part of the Red Sea for treachery and ferocity. We had frequently been cautioned, by individuals well acquainted with their character, against placing ourselves in their power, or trusting them in any way whatever; and it was not long before we had reason to regret that we had not followed their advice. During our intercourse with the tribe occupying the country about Mugnah and Eynounah, one of the chiefs managed to extort a sum of money from some of the officers, who, confiding in his profession of friendship, incautiously placed themselves in his power; an account of the circumstance was immediately sent to the other tribes, and wherever the ship afterwards approached the shore, the natives were evidently prepared, to take advantage of any opportunity that might occur, for attempting a similar act of treachery. Amongst those we met on the eastern side of the Gulf this was particularly apparent, and we could not land in consequence, nor gain any information respecting the mountainous district they inhabit. Fortunately, the failure of our attempts to examine it is scarcely to be regretted, since it has

been explored by a scientific and enterprising traveller, Mr. Ruppell, who, I believe, has given the result of his researches in this interesting region to the world. Under the protection of one of the principal Shaiks he crossed the mountains between Akabah and Eynounah in safety, and succeeded also in examining a considerable portion of the shores of the Gulf. A correct idea, however, of this extraordinary place, which, from its peculiar formation, is perhaps without a parallel on the face of the globe, can only be obtained in traversing it by water; and as an opportunity has been afforded me of examining it in this manner, which it is probable will not soon occur to others, I am induced to record my observations.

The peninsula of Sinai, which is of a triangular form, and bounded on two sides by the Gulfs of Akabah and Suez, terminates in a low bluff promontory, called Ras Mahomed. About 65 miles to the westward, on the opposite coast of Arabia, stands the town and castle of Moilah, and the deep irregular bay, full of islands and reefs included between these two points, forms the head of the Red Sea. The mouth of the Gulf of Akabah is situated in the N. W. angle, and four large islands, Tirahn, Senaffer, Shooshooah, and Barraghan, extend from it in nearly a direct line along the shore to Eynounah, a capacious harbour on the other side, 27 miles above Moilah. Besides these, which are 6 or 8 miles from the land, there are three groups of islets, one near the entrance of the Gulf, another close to Eynounah, and a third in the vicinity of Moilah: the two first are irregularly placed on narrow ridges of coral rock, which, branching out in every direction, connect them with each other and the shore; but the latter lies some distance from it, and the channel inside is broad and deep. In many parts of the bay, extensive clusters of coral reefs are meet with, in every stage of formation; most of them have risen nearly to the surface of the water, but a few are still several fathoms below it. Outside the large islands, and in some of the channels between, the sea is of great depth, there being no bottom at 150 and 200 fathoms, and this is likewise the case in the centre of the bay, where there are no shoals, and the water continues deep close up to the beach.

Ras Mahommed is formed by a piece of flat table-land, about 100 feet high, which rises from the water in black perpendicular cliffs, and is connected with the extremity of the peninsula by a narrow ridge of sand; in its vicinity there is no bottom at 150 fathoms, and a near approach to it, even in moderate weather, is rendered dangerous by the baffling winds out of the two Gulfs, and the confused

swell caused by the meeting of the currents. In a small inlet on the eastern side, called Gozulanee, the water is of similar depth, and when the nacquodahs of the buggalas are forced to run into it for shelter, they are obliged to make them fast to the shore.

From the Cape to the mouth of the Gulf, the coast is rocky and extremely irregular in its outline; and about half way between forms a deep bay, in the upper part of which, there are two small harbours, Sherm Shaik and Sherm ul Moyah. The country below them is covered with a confused mass of hills, which near the sea form several small ranges that run out beyond the coast line, and descend to the water in steep precipices. Above the Sherms the land for many miles, rises gradually, from the summit of the cliffs on the beach, to the foot of the lofty chain of mountains running through the centre of the peninsula, and presents to the view an extensive sloping plain, with numerous sharp peaks of red granite protruding here and there through the surface. It is intersected throughout with deep valleys, but they are so narrow that they cannot be seen from a distance, and the upper part is composed of a stratum of coarse dark sandstone, about three feet thick, covered with a layer of loose stones and gravel; along the shore it projects considerably beyond the face of the cliffs, and as the soft earth beneath crumbles away, falls in large masses and strews the beach with fragments.

The Sherms are situated in the angle formed by a projecting part of the coast, and are separated from each other by a low, rocky tongue of land. Sherm Shaik owes its appellation to the circumstance of an Arab Shaik having died there on his return from Mecca, and is a small semicircular cove open to the S. E. In the centre the water is of great depth, but close along the beach there is a ledge of soundings sufficiently broad to admit of vessels anchoring on it when the winds are from the northward. A range of low craggy hills nearly surrounds the cove, and on the western side the sea washes the base of a mountain that rises abruptly to the height of 1500 feet. At the upper part, where the hills receding somewhat from the beach leave a level spot of sand, a rude building, constructed of fragments of coral rock, has been erected over the remains of the Shaik. The interior is occupied by a tomb, enclosed in a frame of open wood work covered with cloth, and on the wall are hung small pieces of cloth, ostrich eggs, handkerchiefs, and numerous trifling articles, deposited as offerings by those who have visited it; there are also several small glass lamps suspended from the roof but they are only lighted on particular occasions, such as festivals, or when a votary

repairs to the tomb for the purpose of making or fulfilling a vow. The Bedouins in the neighbourhood know nothing about the Shaik except that he was a pious man, who died whilst engaged in performing the Hadj, nor do they appear to hold him in any particular reverence, for they do not take the slightest trouble to preserve the building which is fast going to decay.

Sherm ul Moyah the eastern, and by far the better harbour of the two, is a circular basin protected from all winds, and of sufficient size to contain several large ships; it is approached by a channel about a mile long that decreases in breadth towards the entrance of the Sherm, where it becomes so narrow that, in strong winds, vessels of a large size would not be able to beat through it. Along the channel the shore on either side rises in a continuous line of high broken cliffs, but in the harbour, which, like Sherm Shaik, is nearly encircled by hills, there is a broad belt of low land extending half round it, between them and the beach. On the north side a solitary stunted tree, marks the situation of the well that gives a name to the harbour; it yields an abundant supply of water, but this is brackish and of a very disagreeable taste. The buggalas employed in conveying pilgrims up the Red Sea, always put in here for a supply of water, and to escape the stormy and tedious passage up the Gulf of Suez in the winter months, the pilgrims frequently take advantage of this, and prosecute their journey to Suez by land. As long as the country remains in its present quiet state, European travellers might pursue this route without danger or difficulty; the journey is performed in 5 or 6 days, and a slight deviation from the direct road would enable them to visit the Greek monastery at Mount Sinai, where, they might remain a few days to examine the remarkable places in the vicinity: the expense, is trifling, and, including camel-hire, guides, &c. seldom amounts to more than 4 or 5 dollars for each individual. I should, however, mention that at the monastery, where travellers are entertained in a most hospitable manner, it is rather difficult to gain admittance without a letter of introduction from some of the Greek Christians residing at Suez or Jiddah, and that, although payment is never demanded, a present in money will always be expected according to the size of the party.

The Bedouins of the interior, are always on the look out for vessels anchoring in either of the Sherms, and hasten down with such scanty supplies as the district affords; these are excessively dear and bad, consisting of lean sheep and goats, sour milk, a few eggs, and a small quantity of rancid butter. Most of those we saw belonged

to the Beni Occassel, a branch of the Mezeyne tribe, and were poor miserable wretches with scarcely sufficient clothing to cover them ; but a few who came in from elevated, and more fertile regions in the centre of the Peninsula, were better clad, and appeared fine looking men.

All the valleys intersecting the southern part of the elevated plain above the Sherms, extend in different directions from them, and are too narrow to be visible from the sea ; some of them, especially those running up to the northward, are very long, strait and deep, and bear evident marks of having been formed by the passage of water ; considerable streams must at times flow through them, for the level sandy bottom is deeply furrowed in every part, and overrun with a profusion of colocynth plants and wild flowers. The general character of the scenery is that of rugged sterility, but in two or three places where the ground is covered with herbage, and the tints on the surrounding crags are peculiarly rich and varied, the scene is strikingly romantic ; this is particularly the case in the valley leading from the head of Sherm Shaik, which also exhibits such peculiar features in its formation, that I am induced to describe it more minutely. In the lower part it has a slight curve, but above that it extends for about a mile in a perfectly straight direction, and is no where more than 80 yards broad ; from a bottom of smooth white sand, the cliffs rise like a wall to the height of 80 or 100 feet, and give it the appearance, when viewed from above, of an enormous trench. At the entrance square masses of dark colored granite, about 40 feet apart, and 100 in perpendicular height, form a kind of natural gateway, and the cliffs on each side, which are fringed by numerous projecting fragments of less size, are so disposed as to resemble buttresses and pillars : the whole viewed from a distance at a particular spot, might, with the help of a little imagination, be taken for the half ruined portico of some stupendous antique building. Inside, the cliffs are in general perfectly flat along the summit, but in a few places they are scored by shallow channels, and the water has caused them to assume a rounded form. Near the entrance they exhibit an extensive formation of mixed clay and sand, tinted with almost every shade of red, but towards the upper part they are composed of large round stones firmly imbedded in hard sand ; granite makes its appearance in only one spot, and there a high open cavern is seen in the face of the cliff that has apparently been formed by the separation of a huge mass from it. The upper extremity of the valley, instead of descending gradually from the elevated plain above, sinks abruptly in perpendi-

cular cliffs curving in half circles, and some of them nearly in circles; if these enclosed spaces were roofed over they would make very comfortable habitations, and it would be an easy matter to open a communication with several inside, by cutting doorways in the thin natural wall between them. In the low hills surrounding S herm ul Moyah the clay formation is again seen running in oblique ruins of every shade and hue; the colors are uncommonly brilliant, and the Arab nacquodahs, whenever they visit the harbour, take away a large quantity of the earth, which after it has been well ground and mixed with fish oil, is used as paint in the decoration of their buggalas. The whole of the district about the Sherms has a very peculiar and interesting appearance, and offers an extensive field for the labors of the geologist, who, in every part of it, would find ample employment in the prosecution of his researches.

At the head of the bay, where the hills recede to some distance from the sea, the shore is low and flat, and deeply indented by two extensive shallow lagoons, separated by a ridge of sand. The largest is not less than 20 miles in circumference, and in both the extreme points are connected by an irregular reef, on which there is a group of rocky islets. Some of them are of coral formation, and all are so broken and rugged, as to impress you with an idea, that they are the fragments of a mountain shattered and thrown up from the sea by some powerful volcanic action. Besides these lagoons, there is a wide deep inlet near the entrance of the Gulf, where similar, but smaller, fragments are seen on the reef along the shore.

About half way up the Gulf of Akabah, and on the eastern side, a lofty mountain called Jibal Tybut Issum, rises in a cluster of sharp peaks to the height of 6000 feet. A chain of nearly equal elevation commences a short distance to the eastward of it, and stretching with a slight curve round the head of the bay, terminates near Moilah, where it forms two magnificent mountains, known by the name of the Moilah hills. This chain is formed by a succession of high mountains, connected together at the base, and is celebrated amongst the Bedouins, for the fertile valleys and springs of water with which it abounds; its average altitude is about 5700 feet, and it is remarkable throughout for the ruggedness of its outline and sharp pyramidal peaks. The height of the Moilah hills, ascertained by trigonometrical measurement, was found to be 7000 feet; and they were seen several times during the survey at stations 120 miles distant. The space between the northern part of the chain and Jibal Tybut Issum, although occupied by broken hills 800 or 1000 feet high, ap-

pears at a distance, from the superior elevation of the mountains on either side, like a broad plain descending gradually to the low land at the head of the sea. Like that above Shermul Moyah, it is deeply furrowed in every part by long winding valleys, and marks of water are observable in all, along the sandy bottom. After heavy rains the mountain torrents, accumulating in the hollows, burst forth in streams of considerable size; and as most of the valleys at the head of the bay unite and reach the shore at the lagoons, it is highly probable that both these and the bank of soundings, extending from them as far down as the islands of Terahn and Senaffer, have been gradually formed by their finding an outlet at this spot: to give an idea of their magnitude. I may mention, that in one instance which came under my observation at Tor, a sheet of water 40 yards broad, and in many places 5 feet deep, was flowing through the date groves and gardens for several days.

From Oomucksoor, a low sandy island situated a short distance below Eynounah inlet, a coral reef runs out to the westward in several long irregular prongs, and then turning to the northward joins the shore near another small inlet at the head of the bay. There are three small islands on it, overrun with mangrove bushes, called the Ramahn islands, and a capacious harbour is formed between it and the shore about 10 miles long, and from 3 to 5 broad. The only opening by which it can be entered is close to Oomucksoor island, and this is so shallow and full of rocks that none but small vessels can pass through. Inside, the depth of water is regular throughout 12 or 13 fathoms soft clay, and this is almost the only place in the upper part of the Red Sea where that kind of bottom is met with. Oomucksoor is connected with the shore by a ledge of rocks, and is nothing more than a large sandbank covered with bushes, that has accumulated upon the most elevated part of a half formed coral bank which projects in several prongs, as far down as Burraghan island.

At Eynounah the land near the sea, although very stony, is remarkably fertile, and abounds in mimosa trees and wild flowers; about 2 miles from the beach a long line of cliffs rises from the plain, and forms the outer edge of an extensive tract of table-land, intersected in some places with deep valleys and ravines. A stream of water from the adjacent mountains, flowing along one of these, issues upon the low country through a narrow opening in the cliffs; the soil is highly productive, and the valley with a little labor might be made a beautiful and romantic spot. The steep hills on either side enclose a space of considerable extent, in many places covered

to some depth with a rich alluvial deposit, but this, instead of being turned to account in the cultivation of grain or esculent vegetables, is allowed to remain waste and unproductive. Extensive date groves growing amongst thickets of tall bull-rushes, occupy the side of the valley, along which the stream takes its course, but the mass of vegetation is in most parts so dense, that it is quite impenetrable, and the young trees have not room to throw out their branches. With a little care the value of the plantations might be increased considerably, but the owners, either from indolence or aversion to agricultural pursuits allow them to remain in their present neglected condition. At the entrance of the valley the stream, confined to two or three small channels, flows between banks of rich turf enamelled with flowers, but in the open country beyond is quickly absorbed by the deep sands. On the western side, the summit of the cliffs is occupied by the ruins of a town, called by the Arabs Eynounah, and said by them to have been inhabited a few centuries back by Christians. At present heaps of stones alone remain to mark its site and extent, and from these, which still show the length and direction of the different walls, a tolerably correct idea may be formed of the size and number of the buildings; with the exception of a high square mound that appears to have been a tower, they are all very small, and could not have afforded accommodation to more than 1,500 inhabitants. Our Bedouin guides told us, that there were similar ruins in two places further up the valley, but being some miles distant we were not able to visit them. Across the low country an aqueduct formerly conducted the waters of the stream to another small town on the shores of the harbour, where they were received into a large circular reservoir, still in a good state of preservation. Where the ground is low it has been raised, and where high, sunk so as to preserve the proper inclination throughout; and the channel, about 15 inches wide and 10 deep, is constructed of thick burnt tiles, raised at the sides, and joined together at both extremities.

The situation of Eynounah agrees in many respects with the description given by ancient authors of Leuké Comé, or the White Town, a seaport at the entrance of the Elyptic Gulf belonging to the Nabatæans; and I think it probable, that if the learned commentators of modern times had possessed correct charts of the upper part of the Red Sea, they would not have experienced so much difficulty in fixing its position, and would have placed it here. The author of the Periplus of the Erythrean sea, says, "In navigating to the left hand from the Berenice, after having passed Myos Hormos, and at a



distance of two or three days' journey from that port, in advancing towards the east and the bottom of the Gulf, we find a port and fort-reas named Leuké Comé, where is a road leading to Pætra; a town belonging to the Nabatæans." "From this passage, it is evident we must look for Leuké Comé, near the entrance of the Eitanitic Gulf. In all the old charts the space between Ras Mahommed and the opposite Coast to the eastward, is laid down as its mouth, and the commentators misled by this inaccuracy, could find no town but Moilah outside, that at all answered to the position assigned to it by the ancients. They also appear to have been puzzled by the assertion that you arrived at it & in advancing towards the east and the bottom of the Gulf." On a reference to the chart it will be seen, that there is actually a deep bay or gulf as described, to the eastward of the Gulf of Akabah, and this fact, which was unknown until within the last three years, proves in a very satisfactory manner the accuracy of the account given by the author of the *Periplus*, of this part of the Red Sea. Eynounah, as before remarked, is situated at the bottom of this bay, and is the port nearest to Pætra outside the Gulf. The only route from Akabah practicable for a caravan, passes close to Eynounah, but it is rocky and difficult. Strabo, in speaking of the expedition of Ælius Gallus, says, that Sylleus, the Commander of the Nabatæans, "instead of taking him along a coast that could be navigated ~~without danger~~, guided him to places choked with reefs level with the water, or full of shallows; and that, after having escaped many dangers, and lost some of his vessels in the course of a dangerous navigation, he arrived at Leuké Comé, a place of considerable commercial importance in the country of the Nabatæans." Nothing can be more accurate than the above description of the dangers experienced in the approach to Eynounah. It is also worthy of remark, that the two great tribes inhabiting the eastern side of the Gulf at the present day, which are so closely united in alliance that they may almost be said to form one tribe, occupy exactly the same extent of country, as was formerly possessed by the Nabatæans. Their territory terminates a short distance below Eynounah, and as it is not likely that the boundaries have been altered, this circumstance, confirms the supposition that it is the ancient Leuké Comé, for Strabo expressly states that the town of that name, at which Ælius Gallus disembarked, belonged to the Nabatæans, his friends and allies, and the country below it to another tribe, the Thamudeni, who were enemies.

Between Eynounah and Moilah, the coast is moderately elevated,

and an undulating gravelly plain of some extent reaches to the foot of the hills; it is much cut up by shallow water courses, and although exceedingly stony, is productive, being thickly dotted with mimosa bushes, and patches of long grass or wild flowers. The district owes its fertility to the high mountains in the neighbourhood, where the clouds arrested in their progress to the southward, descend in showers of rain.

The castle of Moilah, at present belonging to the Pasha of Egypt and garrisoned by a small detachment of his Albanian troops, is one of the five built by Sultan Selim in Egypt and Arabia, for the preservation of his conquests in those countries, and like those at Cosaire and Wedge, is of a quadrangular form, with bastions at the angles, and round towers commanding the gates; several pieces of cannon, are mounted on the walls, and by neighbouring tribes who do not possess artillery, it is considered a place of great strength. It is nearly surrounded by groves of date trees, amongst which the houses of a straggling village are seen here and there. Some of them are built of rough pieces of coral rock taken from the reefs, but most are mere huts, constructed of mats and date leaves. A few spots of ground in the groves are under cultivation, which produce enough grain and esculent vegetables for the wants of the inhabitants. The hadj caravan on its route to Mecca always halts here several days, to allow the pilgrims to recruit their strength, and enable them to procure a supply of provision from the stores kept for that purpose. The nearest anchorage is at a semicircular reef, about a mile and a half from the shore, but the best and most convenient is at Sherm Yahar, a long inlet 6 or 7 miles below the town. Nearly in front of Moilah, but at some distance from the shore, there is a chain of islets and reefs, which extends a few miles to the northward. Toubah the largest, is a high rock, but the others are low and composed of coral. In the channels the water is very deep, but near the reefs anchorage may be obtained throughout upon the bank of soundings that surrounds them.

Of the four large islands in the bay, Tirahn and Senaffer are situated upon the extremity of a bank of soundings that joins the land the eastern side of the Gulf; on the south side they rise perpendicularly from the depths of the sea, there being no bottom at 200 fathoms close to the beach. The former is nearly triangular in shape, and about 8 miles long by 5 broad. A mountain surrounded by broken hills of less elevation, occupies the S. W. angle, but the remaining part is a low sandy plain, and nearly divided by a long inlet. The

broad reef along the western side contains several secure anchotages, and, off the north point of the island, it runs out in two prongs, one extending in a succession of small reefs to Rass Furtuk, and the other in an unbroken line towards a cape about 6 miles below it. The hills occupying the S. W. angle of the island, are extremely rugged and are all of secondary formation, no granite visible in any part of the range. The limestone formation predominates in all its varieties, and sandstone is also abundant. Marble, alabaster, and gypsum, were met with, but not in large quantities. Talc and mica abound in many places. The marble is streaked with black and dark blue veins, and throughout the low part of the island, is seen protruding through the loose sand in every direction. The highest peak situated nearly in the centre of the mass of hills, and about 1500 feet high, is composed of coarse dark sandstone covered on the surface with loose fragments; near it there are several rocks of soft micaceous slate. I ascended it on a remarkably clear morning, and the view from the summit was magnificent; the extensive bay with its numerous islands and reefs, lay stretched beneath, as if delineated on a map. and the effect produced by the oblique rays of the morning sun on the hills and huge masses of rock below me, was extremely beautiful. The long narrow Gulf which appeared like a river, with its deep blue waters appeared unobstructed by a single island or reef as far as the eye could reach, and the lofty irregular ranges of mountains that rise from its surface on each side, could be traced until they gradually faded into indistinctness, and were lost in the distance. In returning, I passed through a long narrow ravine, that had apparently been hollowed out by the action of water on the soft limestone; it was nearly a mile in length, and cliffs of a dazzling whiteness rose perpendicularly on each side to a height that excluded the sun's rays from the narrow pathway of smooth sand. Near the extremity it slightly widened, and terminated at a deep precipice, which exhibited marks of being occasionally the scene of a water-fall. The smooth gray rock, disposed in projecting ledges about 3 feet high, appeared, when viewed from below, like a gigantic flight of steps, and was so slippery, that it was only by great caution I was enabled to descend in safety. On Tirahn there is no fresh water, except a very small quantity left in the holes of the rocks after rain, and it produces nothing but colocynth plants and saline shrubs; it is notwithstanding infested with wild beasts. On one occasion when sleeping on shore in a small cave near the beach, we were disturbed through the night by their incessant attacks upon

our stock of provisions. The moon being at the full and unclouded, I had a good view of them, and they appeared to me to be hyenas. These animals must in the winter season subsist principally upon the dead fish thrown on shore. In our walks along the beach, great numbers were picked up perfectly fresh and good; our pilot, as well as the Huteymi fishermen, said they were killed by the cold, and that in the winter they are frequently found along the shores of the Red Sea, above Jiddah, in large quantities. The difference of temperature in the deep and shallow water is at times very great, and is doubtless the cause of their destruction.

Whilst employed in this part of the Red Sea, I endeavoured to ascertain if any ruins or inscriptions existed on Tirahn. The Huteymi fishermen frequenting it, and the natives of the coast in the vicinity, told me there was a tradition amongst them to that effect; but I could never meet with a man who had seen them, or could give any information as to their locality. Diodorus Siculus, in describing the entrance of the Eleanitic Gulf, mentions that "near the main land there are three islands, which have each several ports; they say that the first which is a desert is consecrated to Isis, and that ruined edifices and columns are seen there with inscriptions on them in a barbarous character." Other writers also state that the Egyptians erected a temple to Isis on one of these islands. Few opportunities of exploring Tirahn minutely presented themselves, and as I was suffering from fever when they did occur, I was not able to avail myself of them to the extent I wished. It would have been satisfactory to have ascertained if any ruins still remained, but this could not have been effected without spending much time and labor in the search. From the accounts of ancient authors, it appears that all the islands lying at the mouth of the Eleanitic Gulf were inhabited. Pliny speaks of a people residing at the head of the Arabian Gulf called Tyrcæ, and it is not improbable that they owed their name to the circumstance of being inhabitants of Tirahn.

Senaffer is neither so large as Tirahn, from which it is separated by a broad passage with a reef in the centre, nor are the hills so high and precipitous; a dark and broken mass, principally of sandstone, without any prominent peaks, and no where rising to a greater height than 700 feet, covers the greater part of the island, and on the western side a narrow rocky ridge, curving round, and extending some distance to the southward, forms a capacious harbour. Here 10 or 12 large ships might anchor well sheltered from the northerly gales, but the inlet being broadest at the entrance, and

open in every part to the southward, is exposed in the strong breezes that sometimes blow from that quarter, to the heavy swell rolling in from seaward. These are not, however, of frequent occurrence, and Sherm Senaffer may be considered one of the best and largest harbours in the upper part of the Red Sea.

Midway between Senaffer and Burraghan, the island of Shoo-shooah is seen emerging from the water in the form of a large rock shaped like a quoin; it evidently forms the peak of a submarine mountain, for, with the exception of the eastern side, where it descends gradually for a short distance under water, there is no bottom close to it at 150 fathoms. Burraghan, situated about 18 miles from Senaffer, and 7 or 8 from the Arabian coast, is composed of two heaps of broken coral hillocks, connected by a low ridge of sand. On the S. E. side there is good anchorage in a small bay, and off the N. W. point a bank runs out a short distance, with two or three detached reefs on it.

The bay that forms the head of the Arabian Gulf has been described by many of the ancient geographers, and upon this subject I shall now offer a few remarks. From the confusion as regards localities, apparent in all the accounts given by them, it is evident they were indebted for the information contained in their works to the imperfect reports of travellers, who had only seen many parts of the country from a distance, and had gained a knowledge of others from the natives; there are some places, however, so correctly described that their identity can scarcely be doubted. Diodorus mentions, that after you enter the gulf called Alanites, "you pass from that into a remarkable gulf, for it runs into the land a distance of 500 stadia; it is surrounded on all sides by steep rocks, which render the entrance winding and difficult. There is one especially which advances far into the sea, and narrows the passage so much, that you would suppose you could not enter the strait, or get out if you were inside it. When the waves are raised by the winds, they make the shore resound to a great distance, or rather the natural wall against which they break." The whole of this passage, which appears to have been considered obscure by the commentators, and gave me an opinion that the Gulf terminated in a bifurcation, evidently applies to the entrance of the Gulf itself; and this is confirmed by what Strabo says, in speaking of the smaller or outer one viz. "That there are three desert islands in its neighbourhood." However imperfect in particulars, the general description is correct; and a timid navigator, who would not dare to approach the mass of reefs and rocks at its

mouth when the strong Etesian winds were blowing, might well paint it in similar colors. The ancient voyagers when standing across from the Arabian Coast to Ras Mahommed amongst the islands, supposed they were ascending the Euxine Gulf. And we ought not to be surprised at this, since modern voyagers who have given an account of this part of the Red Sea, have fallen into the same mistake. In passing the real mouth they naturally concluded that they had arrived at another gulf, and as none of them entered or examined it, they supposed, from its appearance, that it did not run into the land a greater distance than 500 stadia. Diodorus then relates, that "near the main land there are three islands, which have each several ports. They are covered with olive trees very different from ours. Beyond these islands the shores of the sea are occupied by precipices, and the navigation is very difficult for about 1000 stadia; for there is not a port or even a proper roadstead for anchoring, and the coast does not present a single place where the wearied voyager can find the least shelter or refreshment. In this part there is a mountain, the summit of which is elevated in unequal peaks of an immense altitude." In the valleys of Tirahn, Senaffer, and Shooshooah, the ground in many places is overrun with bushes, and it is probable that one species of these may be the "olive trees very different from ours," alluded to in the text. Strabo says, "they are peculiar to the country, and are of the kind called by us Ethiopian olives." And other authors relate, that a juice is distilled from them, which has medicinal properties. The difficulty of the navigation beyond the islands for about 1000 stadia, is detailed with great correctness; and in the remarkable mountain, which is probably the Hippos Mons of Ptolemy, although the remainder of the description is somewhat exaggerated, we recognize the high mountain near Moilah. It is about 8 miles from the sea, and rises in sharp conical peaks to the height of 7000 feet. Procopius mentions an island herabouts called Totabe; from the resemblance of the names, this is perhaps the island of Toubah; and the distance from Alana, which was found by the survey to be 130 miles, is nearly correct as given by that writer.

The Gulf of Akabah, which extends, with a slight irregularity in its general direction to the N. N. E., measures exactly 96 miles in length, and is broadest in the lower part near Dahab, where it is 14 miles wide. From that place it gradually contracts to 7 miles in ascending to Nowily, and this breadth continues with very little variation throughout the upper half. At the entrance the width also de-

creases considerably, and the island of Tirahn, lying nearly in mid-channel, divides it into two narrow passages; one at Ras ul Nussaránef, a low cape projecting from the Sinai shore, and the other close to Ras Furtuk on the opposite coast. The former, scarcely five miles wide, is crossed in an oblique direction by a line of reefs, and the largest opening between them, although of great depth, does not exceed three quarters of a mile in breadth; the others are much smaller, and through these confined outlets the *body of water issuing from the Gulf during the strong northerly winds, is conducted to the Red Sea*. The resistance experienced in its passage is so great as to cause a heavy tumultuous sea in all the channels; and even in moderate weather, when the water rushes back to regain its level and is perfectly smooth, the eddies are so strong as to render this entrance impassable, except with a fair wind. The other passage between Tirahn and the Arabian coast, pursues a direction diverging from that of the Gulf, and, being sheltered in consequence from the constant gales that blow down it, is at all times safe and easily navigated. Inside, the Gulf is clear of islands and reefs, for the few that are met with lie close to the shore, and are merely large fragments of rock that have been detached from it.

On the western side, the coast from Ras ul Nussaránef is extremely low for several miles, and forms the boundary of an extensive sandy plain, ~~richly~~ <sup>thinly</sup> covered with mimosa trees and saline shrubs. Throughout this tract there is only one station resorted to by the natives, and this is at a post close to the sea, called Nebekí, where there are several large plantations of date trees, and brackish water is procurable from two or three shallow wells. In the date season it becomes extremely populous, but for the greater part of the year its only inhabitants are a few Bedouins of the Mezeyne tribe, who from their extreme poverty, are obliged to follow the occupation of fishermen upon the reefs fronting the shore, to support themselves and families. Many of the groves belong to the monastery at Mount Sinai, and parties of monks are frequently sent down to keep them in order, and to collect salt which is obtained in abundance from the salt water marshes in the vicinity; a considerable portion is used in curing fish, but the quantity produced is sufficiently large to supply the whole peninsula besides. About 12 miles above Ras ul Nussaránef, the plain turning at a sharp angle to the westward forms a low point, and terminates at the foot of the hills, which here approach the coast in an oblique direction from the interior. This range rising to the height of 1900 and 2000 feet, stretches in a continuous line along the

western shore far beyond the head of the Gulf, and from a distance assumes the appearance of a rocky ridge slightly indented along the summit, and of nearly equal elevation throughout; the highest part is a sloping peak near Abb Rumlal, from which it slightly and gradually lowers towards Akabah. As far as Warsut, a distance of 40 miles, the hills of which it is composed descend in steep precipices far below the surface of the water, but above that cape they are broken by innumerable ravines, and small tracts of low land are seen here and there projecting from their bases; throughout this part the coast line is extremely irregular, and deeply indented with a succession of sandy bays, separated from each other by rocky head-lands.

On the eastern side of the Gulf, and about 40 miles from its mouth, the magnificent mountain Jibal Tybut Issum rises in several sharp pyramidal peaks to the height of 6000 feet; along one side its base is washed by the sea, and the entire mass, which forms the termination of a narrow ridge of less elevation descending from Syria, covers an extent of country at least 60 miles in circumference. A chain of hills nearly equal in altitude commences near it, but instead of approaching the Gulf recedes from it, and sweeps in a semicircle round the head of the Red Sea. Below Jibal Tybut Issum, a mass of low broken hillocks, with little variation in their general form or appearance, extend to Ras Furtuk; near the sea they are composed of coral and madrepore imbedded in hard sand, but further inland, of coarse sandstone and limestones. About this part the country bears marks of having been once submerged, and has a peculiarly barren and savage appearance; the rocks are heaped in rugged and fantastic piles, and in the loose sand of the valleys not a shrub or a blade of grass is to be seen. The coast presents to the view a line of overhanging coral cliffs, separated here and there by deep gullies, and the narrow reef running along it is strewn with detached masses of rock, many of them so large as almost to merit the appellation of islets. Several lagoons are here met with, but with the exception of Sherms Dubber and Majawah, they are all rendered inaccessible by a reef extending across their mouths.

The rocky ridge thrown off from Jibal Tybut Issum to the northward rises in a succession of sloping peaks, but as it approaches the head of the Gulf these disappear, and the summit presents the same even outline observable in that on the opposite side; on quitting the mountain it recedes some miles from the coast, and the intermediate space is occupied by a broad tract of land, that leaves the ridge at an elevation of about 700 feet, and slopes gradually to the summit of the



cliffs on the beach. Viewed from a distance it resembles a smooth unbroken plain, but on a closer inspection is found to be scored by innumerable valleys and ravines, which bear evident marks of having been hollowed out by the torrents. The sides of the low table hills, formed by the intersecting channels, are extremely steep and in some places are apparently of clay formation; at the entrance of wady Omaider Rubeer some of them are composed of short pillars somewhat thicker at the base than the upper part, rising in irregular rows one above the other. Being unable to land we could not ascertain their structure; along this extensive tract, the coast is precisely similar in its general features to that on the opposite side between Warsut and Akabah.

The mountainous ridges running along the shores of the Gulf continue to preserve the same line of direction far beyond its head, and are said to terminate on the borders of the Dead Sea; in many places they rise from the plain like a wall, and the few passes over them are extremely difficult. The long strait valley between, called Wady El Araba, is thickly covered with mimosa trees, and abounds with fertile pasture grounds; before the awful convulsion which destroyed the cities of the plain, the Jordan is supposed to have found a passage through it into the Gulf, and there are many circumstances which render this highly probable.

~~All the~~ mountains and principal ranges on the eastern side are composed of granite; the red kind is most abundant, but the grey also occurs in masses of considerable size. In the ridge on the western side the granite formation likewise predominates, but in the part extending from Warsut to Akabah where it becomes broken and irregular, trap rock, quartz, limestone, feldspar, sandstone, slate, and other varieties, are frequently met with; iron ore must exist here in large quantities, for on several occasions the needles of the Theodolite compasses used in the survey, were observed to be under the influence of a strong local attraction, which caused them to deviate from their proper position several degrees. There is perhaps no part of the world where the scenery presents such striking and peculiar features as in this Gulf; the atmosphere is of that transparent clearness which distinctly exhibits every variation of shade and hue in the most extensive landscape; at sunrise or sunset the beauty and softness of the tints thrown on the peaks and projections of the gorgeously colored mountains that rise from its unfathomed depths, exceed every thing of the kind I ever beheld; at those periods the scenery is grand and beautiful in the extreme, but at other times, speci-

ally when the sun is obscured by clouds, it partakes of wild desolate and rather melancholy character.

Throughout the Gulf no bottom was obtained at 120 fathoms, except on the narrow banks near the shore, and these, which are only found here and there in the upper part, have deep water on them, and rarely exceed half a mile in breadth. In every part soundings were taken to at least 120 fathoms, and frequently to much greater depths; below 150 fathoms the lead experienced great resistance and descended very slowly, but by increasing the weight it was in some instances sent down 300 fathoms below the surface of the water; no bottom however was obtained, and every attempt made to ascertain the depth proved unsuccessful. Above Nowerby a slight discoloration was observed in the water, which at first led us to believe that we had got into soundings, but this on trial proved not to be the case; it is no doubt caused by the quantity of earth washed out of the numerous ravines in the upper part of the Gulf, and probably gave rise to the belief of the natives that there is not a greater depth there than 20 or 30 fathoms.

It is highly probable that the Gulf owes its existence to some violent convulsion of nature, and in fact this is the only way in which the peculiarities observable in its formation throughout, can be satisfactorily accounted for. The rocky ridges on either side, which being of similar elevation and pursuing a direction exactly parallel to each other for a distance of 180 miles, appear as if they had once been united in a single chain—the small width when compared with the length, the similarity apparent in the general direction of its shores, which, whenever they project to any extent on one side, recede in proportion on the other, and the formation of the low tracts near the entrance which have evidently at one period been submerged, render this supposition at least probable.

During the greater part of the year the winds blow with great fury down the Gulf from the N. N. E., but for two months after the vernal equinox they are in general more moderate, and occasional changes take place midway between its extremities; the mountains on both sides rising from the water to a great height, form a deep narrow passage, and it is this which causes the difference observable in the strength of the winds below and above. The moderate northerly breezes increase to furious gales after they have passed Jibal Tybut Is-sum, and when southerly winds prevail, the same circumstance occurs in the upper part. The former coming from the direction of Ailah, are known to the pilots by that name, and there is nothing they dread

so much as being caught in one when crossing the large bay between Moilah and Ras Mahommed ; even when moderate in other parts they are variable there both in strength and direction, rushing through the gaps in the mountains in a succession of violent but momentary gusts, which frequently come from nearly opposite points of the compass in the course of a few minutes : leeward of Tirahn, where the high land is much broken by ravines, it is by no means uncommon to see the water raised up by them every minute, and carried away in a cloud of light foam. In the Gulf we were forced to bear away before them and seek for shelter several times, and once when at anchor in a lagoon we were detained four days ; the violence of the gale was such that, although there were three anchors down, we frequently expected to be driven ashore on the opposite side by the force of the wind. In these constant gales we recognize the Etesian winds mentioned by Strabo in his account of this part of the Red Sea, which appear to have been as much dreaded by the ancient navigators as they are by those of the present day. When they occur in the winter season, a curious phenomenon is seen along the lofty range of mountains extending through the centre of the Sinai peninsula ; each peak is capped by a small white cloud, that remains unchanged and motionless during the gale, however violent it may be. This is probably produced by the heated vapours from the low country becoming suddenly and momentarily condensed in passing the peaks, which are generally covered with snow. As it takes place to a greater extent about Mount Sinai, the highest peak of the range, the inhabitants, especially the Greek Christians, have a fanciful superstition relating to the circumstance, and believe that it is intended to commemorate "the thick cloud that covered the mount," when the decalogue was delivered to the Israelites. In the upper part of the Gulf the weather is generally moderate ; during our stay a breeze set regularly at sunset from the northward, and continuing all night, died away at noon the next day, when it was succeeded for a few hours by calms, or light puffs issuing from the recesses of the mountains. On one occasion, when standing across from Hagoul to Jezi-ret ul Faroun, we experienced the effect of a southerly breeze above Jibel Tybut Issum ; the fluctuation both in the wind and temperature of the atmosphere for several hours, was most extraordinary. The breeze, which was light, frequently came from opposite points of the compass at the same time, the upper sails being filled by a current of air from the S. E. whilst the courses were aback with one from the N. W. and the changes from hot to cold were so sudden that the thermo-

meter continually rose and fell 14 or 15 degrees in a few minutes; the hot puffs felt like blasts of heated air from a furnace, and the cold ones made us shiver. A thick mist had been gathering during the morning about the mountains near Dahab, and at noon, when a light shower of rain fell, they became obscured; it proved the forerunner of a southerly gale that lasted several hours, and strong winds from that quarter always commenced in a similar manner. At the end of this memoir I have given a table of meteorological observations, which exhibits the temperature and state of the atmosphere during the month of January, when the vessel remained in the inlet close to Ras Furtuk; as we never continued many hours at the same place after that month, and were always busily employed, the observations were not continued. The navigation of the Gulf is rendered extremely difficult and dangerous by the sudden changes that occur in the winds, and their violence in the lower part. During the last forty years not more than four or five boats have ventured up it, and the last which was sent to Akabah for the purpose of bringing down the grain given every year to the Howahat tribe by the Pasha of Egypt, was wrecked at Mugnah. The most favorable months for ascending it are April and May, for then the weather is moderate at intervals, and southerly winds more frequently occur: whenever the "Ailaha," cease to blow with such excessive violence, there is also a current setting up it, which, although not very strong, would assist a vessel materially. Steamers will always be found better adapted for the navigation of the Gulf than sailing vessels.

In the upper half of the Gulf, water-courses are extremely numerous on both sides, and during the heavy rain that sometimes falls, torrents of considerable magnitude find their way into it. All the small tracts of low land lying at the foot of the hills on the Sinai side, have been gradually formed by the accumulation of soil washed out of them, and these, which in many places project considerably from the line of coast, afford shelter to vessels from the violence of the prevailing winds. The narrow bank extending along the shore above Warsut for a distance of 40 miles, has no doubt been produced by the same cause; the depths on it vary from 20 to 50 fathoms, but in most of the bays, there is a broad ledge along the beach that has not more than 8 or 10 fathoms on it. On the eastern side the torrents flowing across the tract of elevated lands between the mountains and the sea, are absorbed by the soft soil of which it is principally composed, and a very small quantity of water reaches the Gulf from them; we find in consequence that no low points have been

thrown out, and that in most parts the bank has not accumulated to the same extent as that on the other side. In the small bays at the mouths of the valleys the water is deep close to the shore, and there is no anchorage on this side above Jibāl Tybut Issum, except at O-maidar island and the reefs before Bīr-ful-Marshi. In the valleys, and on some of the low capes, there are extensive date groves, to which at certain seasons the Bedouins of the surrounding country resort in great numbers. These localities, with the different valleys and anchoring places, I shall now briefly describe.

The broad promontory of Dahab, situated on the western side about 30 miles from the entrance of the Gulf, projects two miles from the coast, which both above and below it is extremely precipitous; on the south side a low ridge curving inwards from the outer point, forms a circular harbour sheltered from all winds, and outside there is another extensive anchorage, defended from the swell by a long and narrow coral spit. The plain rises gently towards a spot where an opening in the hills gives access to a succession of rugged defiles; near the sea it is low and sandy, but farther inland the soil becomes mixed with a large portion of clay, and thickly strewn with masses of rock or rounded stones. From the opening, numerous channels worn by the torrents cross the northern part of the plain towards the beach, and some are of such magnitude that when filled they must be almost impassable; one of them measured in some places 100 yards in breadth, and the perpendicular banks were six feet high. In these banks the layers of alluvial soil deposited at different periods are exposed to view; it appears to be composed of fine clay mixed with a small quantity of sand and particles of mica, and in many parts, especially about the date groves, has accumulated to a considerable extent. At the spot where the torrents reach the sea, the shore for a distance of two miles is covered with vegetation, and the date plantations, although neglected by their owners, are large and luxuriant. Several wells have been dug amongst them, but they are all very shallow; and in the best of them, the water is so bitter and brackish as to be scarcely drinkable. There are also some clumps of date trees about two miles to the southward, where the low shore of the promontory terminates at the base of the hills; they have sprung up in front of a narrow chasm in the exterior part of the ridge, which forms the entrance of a wild and romantic looking ravine. In ascending it, the rocks assume fantastic shapes, and towards the upper part contract so much, as to leave only a narrow passage, which leads into a curious natural shaft or well that has no

other outlet ; it is about 30 yards in diameter and the rock rises in a smooth perpendicular wall all round to the height of 150 feet ; the bottom is covered with alluvial earth, and opposite the entrance there is a deep indentation in the summit of the cliff, from which in rainy weather a waterfall descends. Dahab belongs partly to the Mezeyne Bedouins and partly to the monks at Mount Sinai, who possess several of the date groves. In the Arabic language the word Dahab signifies gold, and it is a received tradition amongst the natives and Greek Christians inhabiting the Peninsula that it is the Golden Port, to which the fleets of Solomon brought the gold they obtained at Ophir. In the middle of the plain there are some heaps of stones, called by the Arabs the tombs of the Christians, which have been erected over the remains of the monks who have died and been interred here during the date season. Near them the ruins of several small buildings are seen, and amongst the groves the walls of one about a hundred feet square may still be traced ; the latter has been constructed of loose granite fragments, and the former appeared to me to have been merely enclosures for cattle. The plain was minutely examined ; no ruins or remains of any kind were discovered.

From Dahab to Nowibi, a distance of 30 miles, the shore is bold, and there are only two places, Rasarzer and Warsut, where low land is seen ; a vessel might anchor at the former upon a narrow ledge running along the shore, but the plain does not extend sufficiently beyond the line of coast to afford shelter, except in a very slight degree, from the swell that constantly rolls down the Gulf ; here there is a large lagoon, but its entrance is blocked up by a reef. The small bay at Warsut is protected from the violence of the northerly winds by a sandy point, and near the beach the depth of water varies from 8 to 12 fathoms.

Nowibi belongs to the Mezeyne tribe, and from the value of its extensive date groves is considered a place of some importance ; the plain, about 4 miles long and 3 broad, runs gradually to the foot of the hills, where it attains a height of 200 feet, and in its general features and formation bears a great resemblance to that at Dahab. From the ravines many deeply furrowed water courses descend to the beach, and the barren surface of the elevated part is encumbered in a similar manner with heaps of large stones and fragments of rock. On the south side, the plain projecting out nearly at a right angle with the coast line, forms a deep bay well protected from the prevailing winds, and affording good anchorage in every part close to the shore : in the centre the water is deep, and a short distance out-

side no bottom is obtained at 100 fathoms. At this part of the plain a dense mass of date trees extends for about a mile along the beach ; the different beleds or plantations belonging to individuals, are surrounded by a low wall, and in many of them huts constructed of date leaves have been erected ; in general the groves are much neglected, and there are very few that exhibit any marks of cultivation. During the few days we remained at this place we did not see a single Bedouin, and apparently it is not visited by them until the season when the dates are fit for gathering. For the remainder of the year the huts, are not inhabited, and it speaks highly in favor of the character of the Tawara Bedouins for honesty amongst themselves, that the huts are left unfastened and full of articles of domestic use, to the mercy of any one who may choose to enter them. Amongst the date groves only two wells were found, and the water of these was execrable ; but from the great number of water courses, and the luxuriance of the vegetation, the supply must generally be abundant. The northern extremity of the plain is thinly covered with stunted mimosa bushes and tufts of withered reeds, and by a narrow strip of low land, running round the base of a high rock projecting from the ridge, it joins another level tract called Amhaid, where there is a small grove of date trees. •

Abú Rumlar is a small bay 12 miles above Nowibi, situated at the mouth of Wady Om Nash. The plain above it, which lies between two rocky spurs thrown off from the main ridge, terminates in another small valley called Wady Mowaleh, and is dotted here and there with mimosa bushes and tufts of coarse grass. At the extremity of the northern hill that bounds it, there is a remarkable white rock named by the Arahs Abú Bucko ; it forms the point of a high cape, and can be seen at a considerable distance. The bay at the mouth of Wady Om Nash is moderately large, and the anchorage good ; but in one part a small reef projects from the shore, which from the discolored state of water is scarcely discernible.

Between Abú Rumlar and Juzerat ul Faroun, a distance of 20 miles, several small bays affording anchorage are met with, and the Wadys or valleys, Zoara, Tye, and Mokabelat, are passed in succession ; the description that has been given of Abú Rumlar will apply to all them. Near Wady Tye a rocky hill called Omhaye descends to the water in steep precipices ; it forms the eastern extremity of a ridge that crosses the Sinai peninsula nearly in a straight line, and terminates at the gulf of Suez in a remarkable high bluff mountain, known by the name of Hummum ul Faroun. This ridge sepa-

rates the Tawara tribes from the Tyana and Terrabeen, and the country on either side abounds in pasture grounds, which from the abundant supply of rain water, are always covered with grass and wild flowers.

Juzerat ul Faroun is a small rocky islet placed close to the shore, about 8 miles from the head of the Gulf. The coast in the vicinity is extremely broken, and the islet, which does not exceed 400 yards in length, appears as if it had once formed a portion of the hill that runs close to it on the main land. The channel between it and the shore, although very narrow, forms the best and only secure anchorage above Dahab, being sheltered from both the N. E. and southerly winds. The hill occupying the greater part of the islet rises to a narrow ridge running along the centre, about 120 feet high, and is separated from a large detached rock upon the south point by a piece of low ground, covered with heaps of loose sand and withered bushes; upon its summit stands a deserted fort or castle, which, although evidently of an ancient date, has suffered but little from the destroying hand of time, and upon the lower projections, massive walls, buildings and outworks, are seen in every direction; the island is in fact strongly fortified in every part.

Many names have been rudely scratched on the soft stone in various parts of the building, but only one inscription was discovered. Upon a small plateau near the wall connecting the northern outwork with the main body of the fort, but considerably below the summit of the ridge, there is a large covered reservoir hewn out of the rock; it has neither door nor windows, and if it had not been for some holes in the roof, through which a view of the interior was obtained, would have escaped observation; it is at least 40 feet square and nearly as deep, and the same care appears to have been bestowed on its construction as on that of the citadel; two rows of pillars connected by arches, support the roof throughout its length and breadth, and these with the sides, are covered with a coating of hard smooth plaster; another deep excavation close to it has evidently been intended for a similar purpose. The high detached rock on the south point of the island is covered with ruins, and on the low land between it and the main hill there are several ranges of buildings, which have apparently been used as barracks and storehouses. The walls throughout are built of granite cemented together with a mixture of clay and lime, and although constructed of such crude materials, are even and regular: they are from 20 to 40 feet in height, and from two or three patches still adhering to the outer surface, have evidently once been



covered with plaster ; the angles of the walls, gateways, and windows, are faced with bricks, alternately large and small, and these contrasted with the dark color of the rest of the building, add greatly to its picturesque appearance.

From the Bedouins about Eynounah and Mugnah, we had received a very exaggerated account of this place, which they said was situated upon a large island in the centre of the Gulf ; they called it El Dier (the monastery), and asserted that it was erected by the Christians some centuries back.

At Juzerat ul Faroun we remained several days. Soon after our arrival, two Turks, mounted on camels and attended by a few Arabs, were observed coming along the beach ; and as soon as they halted a boat was sent to bring them on board the vessel. One of them a smartly dressed young man, said he was the son of the Aga, or Commandant at Akabah, who had dispatched him with a complimentary message to the officers, inviting them to visit the castle. Shortly after there appeared two Bedouins, who, from their attire and equipments, were evidently men of some consequence ; they expressed a wish that a few of the officers should accompany them to their tribe, then encamped near Akabah, but being acquainted with their character, and suspecting their motives, the invitation was declined. The day before our departure the Aga came on board to pay his respects and repeat his offers of service ; he was accompanied by two or three Shaiks of the Uleygat, and seemed anxious that we should not leave without visiting the castle. This we had wished to do, as it would have given us an opportunity of examining the country about Akabah ; but the Government of Egypt was then in such an unsettled state that the Aga could not have protected us from the extortions of the Arab chiefs, and it was deemed imprudent to place ourselves in their power ; we were reluctantly obliged, in consequence, to abandon all thoughts of visiting the remains of antiquity that are said to be still visible in this part of the Gulf.

At a short distance above Juzerat ul Faroun there is an irregular valley with a few date trees at the entrance, and the mountains near it run out in a high rocky cape, which forms the western point of the large bay at the head of the Gulf. The castle of Akabah is situated on the eastern side, and is similar in form to that at Moilah ; it belongs to the Pasha of Egypt, and is garrisoned by an Aga and 50 soldiers, who are placed there to provide for the necessities of the Hadj caravan, and keep in check the tribes through which it has to pass on its route to Moilah. A straggling village is seen amongst

the date groves, and two or three miles below the castle, a small fort or tower in a most dilapidated condition, called Kusser ul Bedavi. Amongst the hills on the western side, and a few miles from the sea there are the ruins of a large building called Deir Sagalta; it appears to have been a monastery dedicated to St. Cecilia, and has probably given rise to the mistake made by the inhabitants of the lower part of the Gulf respecting the fort on Juzerat ul Faroun, with which they have apparently confounded it. On the eastern shore of the bay the remains of two towns are still visible; one of them is now overflowed by the sea, and the other is said by the natives to be the ancient town of Ailah. From the resemblance of the names, it is not improbable that it is the Elath of Scripture, which is supposed to have been situated some where about this part of the Gulf; and in this case the position of the other town would answer to that of Eziongeber described as being "beside Elath on the shore of the Red Sea, in the land of Edom." During earlier periods of the Christian era, Ailah, or Akabah as it was called from the steep pass near it, appears to have been a place of considerable size and importance; it gave a title to one of the bishops of the Greek Church, whose jurisdiction extended over the whole of the Sinai peninsula, which had been bestowed by the Emperor Justinian on the church, and is mentioned by the historians of the time as being very populous. During the crusades it was stormed and taken by the Franks, but they were shortly after driven out of it by the celebrated Saladin, who, by transporting vessels from Cairo to the Gulf on camels, was enabled to attack it by sea and land at the same time.

On the eastern side of the Gulf, few large valleys or anchorages are met with. In the extensive tract of coral formation below Jibal Tybut Issum, there are several lagoons of Sherms; but, with the exception of Sherms Dubber and Mugnah, they are closed by narrow reefs running along shore across their entrances; they have evidently been formed by the action of water on the coral rock of which the shore is composed, for they are only found at those spots where several water courses unite close to the sea. Sherm Mujowah may be taken as a fair specimen of these small but secure harbours, which are met with in every part of the Red Sea. It is of a circular form, about 300 yards in diameter, and surrounded by low overhanging coral cliffs, broken here and there by deep channels worn by the rain water; the depth decreases gradually from the centre, and the passage leading into it across the coast reef is so narrow, that the water is perfectly smooth inside even in the heaviest gales.

A few miles below Jibāl Tybut Issum a broad valley descends from the interior to the shores of the Gulf; it is called Mugnah, and forms the boundary between the territories of the two great tribes, the Howahtat and Omrán, to each of which it partly belongs. Like Eynounah, it is fertilized by a stream of water flowing from the range of lofty mountains to the eastward, and is covered in many parts to some depth with the alluvial soil. A dense mass of date trees extends along one side, and wherever the water, escaping from the main stream, spreads in small rills over the open part of the valley, the ground is covered with verdure. The numerous huts seen amongst the groves, show that at certain seasons Mugnah becomes a populous place; and it is in fact the principal station inside the Gulf, belonging to the Howahtat Bedouins. On the summit of a rugged cliff overlooking the plain, stand the half ruined walls of what appears to have been a castle, but whether erected by Christian or Mahomedan, could not be determined; the natives ascribe it to the former, and they are perhaps correct in their supposition.

Between Mugnah and Akabah the coast is nearly destitute of anchoring places. At Bír ul Marshi there is a bay formed by the prongs of a reef projecting from a low point, and the valley appears, from the number of women and the large flocks always seen there when we approached it, to be one of the permanent stations of the Omrán. Wady Omaider is 20 miles above Bír ul Marshi, and at its mouth has a small harbour defended to seaward by a rocky islet, connected with the shore by a reef inside, the bottom exceedingly irregular, the depth varying from 10 to 40 fathoms in a space not more than 300 yards square. Whilst at anchor here, four or five Omrán Bedouins made their appearance, accompanied by an old woman, bringing with them sheep, leban, or sour milk, and butter, for sale. On leaving the vessel, a quantity of gunpowder, which they prize above every thing else, was given to one of them, with strict injunctions to divide it with his companions; this could not of course be accomplished without a fierce dispute, which soon rose to such a height, that we expected every moment to see it end in a general battle; swords and spears were flourished about in defiance, and at length one of the party, a most ferocious looking fellow, made a thrust at the man to whom the gunpowder had been given, and very nearly put an end to his quarrelling for ever. He was saved, however, by the timely interference of the old woman, who had been extremely active throughout the fray, and an equitable division having been at last made, they set off for the interior, apparently upon as good terms with each other as if nothing had happened.

Above the island there are two large valleys, Hagoul and Omaider Kubeer, separated by a piece of low table land; they are filled with date groves, and at the mouth of the former the coast forms a large deep bay. In ascending the Gulf we stood in it, and the wind dying away as we did so, obliged us to remain during the night; the depth of water was found to be so great in every part that we could not anchor, but were obliged to secure the vessel by hawsers made fast on a small reef close to the shore. As we entered the bay, a party of Bedouins came down to the beach, and soon after a boat was sent to bring them on board; for some time they conducted themselves with great civility, but their extravagant demands for presents being refused, hints of vengeance were thrown out by some of them, and they departed in high displeasure. A violent altercation occurred amongst them after they got on shore, which continued at intervals until midnight, and was not terminated until their weapons had been crossed. As far as we could learn no blood was shed, and towards morning they apparently became reconciled, and either retired to rest or quitted their position near the vessel. From some expressions that reached us, it was evident we were the cause of the dispute, and as they had been observed just before dark to dispatch two of their number to the interior, probably to collect their companions, it was deemed prudent to have every thing in readiness to repel any attack that might be made during the night. Although not more than a few yards from the shore there was no chance of their getting on board; but from a line of high cliffs not 100 yards distant, they might have swept the decks with their long matchlocks, and caused us considerable loss. Nothing, however, occurred to create further suspicion, and a light breeze springing up before day light enabled us to leave our dangerous position.

The mountainous district on the eastern side of the Gulf is inhabited by two strong tribes, the Omrán and Howahât, who are perfectly distinct from each other, but closely connected by alliance. From their warlike disposition, and the inaccessible nature of the country they inhabit, they have always been independent and powerful; and Mahomed Ali, the Pasha of Egypt, although he succeeded in reducing most of the other tribes on the shores of the Red Sea, found that he could not subject these. On several occasions they pillaged the Hadj caravan in its passage through their territories and defeated the troops sent against them; every attempt made by the Pasha to subdue them failed, and although of late they have allowed him to claim authority over them, it is merely nominal and

only premitted in consequence of his sending the principal Shaiks a yearly present of considerable value. Of this he is well aware, for when application was made to him, through the British Consul at Cairo for a firman to these Chiefs, he declined giving one, on the plea that amongst these tribes, where we should require it most, it would not be respected. At the period when the request was made he was about to engage in a war with the Porte which it was very generally supposed would end in his downfall, and they had already begun to take advantage of his situation to evince their contempt for his authority. The Turkish Aga stationed at Akabah does not possess the slightest control over them; and although placed there for the express purpose of protecting the Hadj caravan on its route to Mecca, he is not able to prevent them from exacting from it what duties they please. Both the Omrán and Howahtat Bedouins have a bad name, and are much dreaded by the neighbouring tribes; they are said to be ferocious, treacherous, and cruel, and from what we saw of them they appear fully to deserve the character. Throughout the Red Sea, when a man is killed by an unknown hand supposed to belong to a particular tribe, his friends do not think themselves justified in revenging themselves upon any but the murderer, but the Omrán and Howahtat, in opposition to this general rule, retaliate upon any individual of the tribe they may happen to meet, whether guilty or not. By the Arabs of the seaport towns they are held in great detestation, and wherever they are obliged to anchor upon their coast, they are careful to select such spots as are out of their reach.

The territories of the Omrán Bedouins extend from Akabah to Mugnah, and small parties of them are found to the northward of the Syrian Akabah, about 50 miles from the head of the Gulf. Our intercourse with this tribe was confined to the few individuals we met with at Omaider island, and Omaider Kubeer. In appearance they differ slightly from the Howahtat and Towara Arabs, having broader and higher cheek bones, and the lower part of the face more attenuated; but what struck me as most remarkable, was the diversity of features, make, and complexion exhibited in so small a number of people belonging to the same tribe; some were extremely dark and of low stature, but others were tall, fair, and muscular; this difference probably arises from the latter having always resided in the mountains, and the former in the low country. From the constant quarrels that occurred amongst them, they are evidently of a fierce and vindictive disposition, and our Graffyr, or protector, who knew them

well, confessed that the supposed sanctity of his vocation would be ridiculed amongst them. About sixteen years ago, some merchants belonging to Jiddah, ventured, up the Gulf in two boats laden with coffee and cloth, in the hope of selling their cargoes to great advantage amongst these people. After many narrow escapes from shipwreck, they succeeded in reaching Hagoul, where they found a large party of the Omrán encamped. Their goods were quickly disposed of at a high price, but when the purchasers had got the bales safely stowed on their camels, they refused to pay a single dollar, and marched off to the mountains, laughing at the simplicity of those who had placed such a valuable prize in their power.

To the eastward of the mountains inhabited by the Omrán, the country is occupied by the Mázi, who can muster a force of about 600 fighting men. For a long period they have been on hostile terms with the former, but notwithstanding their inferiority in point of numbers, have managed to preserve their independence. A large party separating many years ago from the parent tribe, emigrated to Egypt, and they have now spread all over that part of the coast lying between Suez and Cosseir.

The authority of the Howahát Bedouins is acknowledged along the sea coast from Muguah to a short distance below Eynounah, but how far inland we could not with any certainty ascertain; this district they call Zaid, and consider it a part of Shóm (Syria). Allured by the hope of plunder, they frequently extend their predatory excursions to the small harbour of Wedge, or Wejh, 100 miles to the southward of Moilah, and it is not uncommon to meet parties of them in that vicinity. On one occasion they attacked the storehouses erected there by the Pasha of Egypt to supply the pilgrims, and were not driven away until they had severely wounded several of the Bedouins under whose charge they had been placed. Like all the large tribes it has numerous subdivisions, each distinguished by a particular name, but bearing in common the general appellation of Howahát. There is a branch of this tribe united with the Omrán, inhabiting the valleys of Syrian Akabah, and together they can bring into the field a body of about 350 horsemen, with numerous camel drivers. The principal chief of the Howahát is Shaik Ale-yan, whom we found encamped at Eynounah when we first went there. He is an intelligent communicative man, and if it were not for a certain sinister expression of countenance, would be esteemed handsome. He told us he could muster about 6000 fighting men, which is perhaps near the truth.

The town of Moilah, with a small district in the vicinity, is inhabited by the Beni Augabah, the remnant of a large and powerful tribe that once possessed the whole of the country between Wedge and Akabah, now occupied by the Billee, Howahtát, and Omrán. In consequence of some dissensions many of the minor branches separated from the parent tribe about two centuries back, and established themselves in Syria, where they soon became formidable, and from their ability to send into the field a large body of horsemen, were for a long time enabled to maintain an ascendancy over their warlike neighbours. Their power has since declined, but they are still met with in considerable numbers in the valleys bordering on the Dead Sea. A series of wars in which they were dispossessed of the greater part of their territories, followed by seasons of mortality and other calamities, thinned the numbers and diminished the strength of the parent tribe; and many quarrels arising soon after amongst the different families, they began to quit it, until at last this once powerful tribe insensibly dwindled into insignificance, and almost disappeared from the land.

The peninsula of Sinai is occupied by three small tribes, which collectively bear the appellation of Tawara; of these the wealthiest and most powerful is the Sawaleah, to which the greater part of the country on the western side belongs. It is divided into several small branches; one of them, the Ulad Said, does not bear a very good character, being reproached with inhospitality to travellers; and another, the Koreysh, is said to have descended from the celebrated tribe of that name near Mecca. The Beni Soleyman numbers but a few families, which reside at Tor; and there are several other subdivisions met with along the eastern coast of the gulf of Suez. The Uleygat are next in importance to the Sawaleah; they are settled in the N. E. part of the peninsula near Akabah, and have a bad name. The district occupied by the Mezeyne extends along the shores of the Gulf from Nowibi to Ras Mahommed, but they are seldom found near the coast, except at Sherms Sheik and ul Moyah; most of those we saw were haggard and emaciated, and appeared to be in a state of abject poverty. Although the Tawara tribes often quarrel amongst themselves, they invariably unite when attacked by any of those inhabiting the country to the northward of them. They were formerly independent, and at that period every merchant or wealthy individual at Suez was obliged to employ a Tawara Arab as a Graffyr, or protector, to prevent his house from being plundered; they also exacted a duty from all vessels entering their harbours, but

for the last few years they have not been able to enforce it. With the most powerful of the northern tribes they were often at war, and have frequently been known to cross the gulf of Suez and attack the Mázi, in whose territory they sometimes extended their incursions as far as Cosire. Within the last few years their power has declined, and at present they acknowledge the authority of the Pasha of Egypt, who by keeping some of their chiefs in custody, and stopping their supplies from Cairo and the Red Sea ports, soon reduced them to obedience. Latterly they have also lost the profits accruing from their trade with Suez and the passage of caravans; and are now perhaps in a state of greater poverty than any other of the neighbouring tribes. The Tawara Arabs have no horses, and but few camels; and their flocks of sheep or goats are by no means numerous. Amongst themselves robberies are almost unknown; any article may be left in an open hut without the least risk of its being stolen, and instances have occurred of fathers slaying even their own sons when detected in a theft; they are not, however, so scrupulous with the property of strangers. The women lead a very laborious life, and are in consequence strong and hardy. Those we saw had few personal charms to boast of, which may be attributed to that cause and constant exposure to the weather from an early age.

To the northward of El Tye, the mountain ridge that crosses the upper part of the Sinai peninsula, there are three tribes—the Heywat, Terabeen, and Tyana; being descended from one stock they live together in strict alliance, and invariably assist each other when at war with the Tawara. Besides these three, is another small tribe, the Ulowecn, to which the country about Akabah belongs; but I am not certain whether it is a distinct tribe or a branch of the Omrán.

Besides the tribes I have mentioned, the large bay at the head of the Red Sea is much frequented by the Hauteymis, and a few families have been allowed to establish themselves on some of the islands there, on condition of paying a yearly tribute of two dollars a head to the Howahitat. This singular tribe is found scattered throughout Syria, Arabia, and Egypt, and it is said their encampments are even met with in Mesopotamia and Persia. Except a small tract of country bordering on the Red Sea between Wedge and the island of Hassanee, they have no territory, and they are only permitted to remain in the spots they inhabit on payment of a tribute to the tribe that owns them. By all the other tribes they are held in disrepute for their mean, treacherous disposition, and wandering propensities, and you cannot offer a greater insult to an individual of another tribe



than to ask if he is an Hauteyini; their women are also said to be licentious, and no true Bedouin will intermarry with them. In the Red Sea small parties of 300 or 400 are met with every where along the coast, but their principal place of resort is Wedge. The Hauteymis live chiefly on fish and jowaree, with occasionally unleavened bread made of very coarse flour; fish being the principal article of subsistence, they are particular in selecting for their own consumption only those which are in good condition, for they say that if they are not fat they yield no nourishment. Superstition forms a prominent trait in their character, as in all Bedouins. When accompanying us to explore caverns or ruined buildings, they always exhibited a great dread of the evil spirits that are supposed to inhabit them, and would never enter until we had set them the example, and they had spit over the left shoulder to defy the devil. Although the Hauteymis are considered by the other tribes a despicable race, we always found them obliging, generous, and civil, and never had occasion to repent having placed confidence in them. On our way up the Red Sea, the Shaik of the Billee at Wedge, understanding that we were about to proceed up the Gulf of Akabah, was anxious that we should employ a Graffyr or protector, and pointed out a man whom he recommended us to take. By his own account he was descended in a direct line from the most powerful chief of the Beni Augabah, and in his fallen fortunes had found no other resource to keep himself from starvation but that of undertaking to protect the persons or property of travellers passing along the coast in the pursuit of their various avocations; although apparently poor in the extreme, and, as far as I could see, possessed of no authority whatever amongst his associates, yet they all agreed that he would be respected by any of the tribes we might fall in with, and prove of great service in communicating with them. This method of gaining a livelihood is very common amongst the Bedouins, and the influence of those who follow it, although they are generally the poorest of their tribe, is said to be so generally acknowledged, that it may always be considered a sufficient security against insult or extortion.

*Meteorological Table, Red Sea, January, 1833.*

Date	Thermometer.			Evaporation.	Dew Point	Winds and Weather.	Remarks.
	Barom.	Minimum.	Maximum.				
1	30.13	54.	69.4	0	0	Moderate N. E. & N. N. W. Clear.	
2	30.00	66	78.2	0	67.2	Light N. E. & S. .... Hazy.	
3	29.97	71.	79	0	61.8	Moderate N. W. .... do	
4	30.04	63.	80.	0	47.8	Strong at Nd. .... do.	
5	30.00	62.	87.	0	44.3	Modt. gale at Nd. .... Clear	
6	30.04	60.	66.	0	47.8	Strong at Nd. .... do.	
7	29.98	57.	60.	0	45.9	Mod. gale at Nd. .... do.	
8	30.15	50.3	58.	0	42.	Do. .... do	
9	30.13	53.	59	0	34.2	Do. .... do.	
10	30.10	62.	64.4	0	34.3	Fresh at Nd. .... do.	
11	30.02	57	67.	0	43.6	Modt. Nd & N. E. .... do.	
12	29.91	62	68.	327	41.5	Modt. gale at Nd. .... do.	
13	30.00	60.	61.	505	13.9	Do. .... do. .... Cloudy	
14	30.03	52.	62.	581	35.3	Do. .... do. .... Clear	
15	30.05	60	61.3	613	37.9	Modt. N. W. & N. E. .... do.	
16	30.10	58.	68	217	51.7	Light at Sd. & N. E. .... do.	
17	30.02	55.	68.	0	50.0	Light at N. E. E. & S. E. .... do.	
18	29.90	61.	71.	0	55.2	Moderate at Sd. and S. W. Cloudy.	
19	29.92	66.	73	0	12.	Modt. at S. W. Thick. and gloomy	
						Light rain. ....	
20	29.90	63	72.	0	34.9	Strong at N. E. & N. N. .... Clear.	
21	29.93	65.	68.2	371	37.8	Strong at N. W. .... do.	
22	29.84	62.	60.	557	34.5	Do. .... do. .... do.	
23	29.85	62	66	467	39.6	Light at Nd. & N. E. .... Hazy.	
24	29.72	58	62.	0	32.1	Modt. gale at Wd. .... Cloudy.	
25	29.91	49.	51.	0	25.7	Hard gale do. Thick and Cloudy	
						Light rain.	
26	30.00	52.	56.	0	0	Modt. at N. W. .... Cloudy.	
27	30.23	47.	55.	0	0	Light at Nd. .... Clear.	
28	"	"	"	0	0		
29	"	"	"	0	0		
30	29.93	56.	60.	0	52.4	Modt. at N. E. .... Clear	
31	29.94	58	67.5	0	51.9	Modt. at Nd. .... do.	

These observations were taken when at anchor a short distance outside the Gulf of Akabah, the strong gales blowing down it were diverted from the spot by the high mountains in the vicinity, and although they frequently approached to within a mile of the vessel, they seldom reached her. The dew point was ascertained from the temperature indicated by a Thermometer having the bulb covered with wet cloth.

VI.—*On the Nerbudda River.* By Lieut. B. P. Del'Hoste, 16th Regiment N. I.

In the month of November 1828, being in command of an outpost at Bhoderpoo, on the right bank of the Oursing river, and distant four and half miles from Baroda, I was informed that any survey or reports on the state of the country would be acceptable. My attention was particularly called to the subject of the navigation of the Nerbudda river, and, was directed to procure such information on this point as I could acquire.

To fulfil the above directions, I proceeded to Tulluckwarra in the month of April 1829, my intention being to follow thence the course of the river towards its source as far as I could. I accordingly advanced by a road on the right bank to the village of Gurreysir, a distance of six miles. The road lay over a level and well cultivated tract of black soil; the course of the river was visible the whole distance, and offered no impediments whatever to navigation; the depth ascertained from the guides varied from twelve to fourteen feet.

At Gurreysir we crossed the river on a good sized boat. Near the village we observed the remains of another large boat clinkerbuilt, something resembling an English barge, regarding which I could obtain no information beyond learning that it had been there for many years, and had been brought from Tulluckwarra.

Beyond this village the river appeared full of large rocks, the passage for the water between which was barely three or four feet; the total breadth was eighty yards, at this point, and the depth of water where I crossed (in the centre of the stream) eighteen feet, measured with a pole; the right bank was low, level, and slightly covered with jungle. Small temples appeared on the edge of the river, erected, I was told, by different people, as tokens of having fulfilled certain vows. The left bank, on the contrary, was precipitous and rugged towards the river, but towards the south numerous ranges of hills, covered with jungle, were visible. These hills form the end of what is called the Satpúra range. I may add, that as far as Sulpaun the features of the country were similar. Having crossed the river, I continued my route along the left bank to Goragaum, a small Bheel village, distant three and a half miles. The course of the river appeared impeded by rocks, through which the stream passed with a continued gurgling sound, that could be heard at a considerable distance. The road to this village was over a succession of small hills.

Soil light; here and there patches of dense jungle were traversed. Five and a half miles from Goragaum, over a road similar to the above, and passing the small Bheel village of Torwan, I descended into the bed of the river, and arrived at the Makri Ghaut. At this place there is a ridge of rocks stretching completely across the river, which is nearly one hundred yards broad, causing a fall of about twelve feet in height. I took the opportunity of bathing in the river, the water of which was perfectly clear. The force of the current was such as to compel me to hold on by the large rocks, of which the river is full below the fall; the bed was covered with large round pebbles, rendering it difficult to walk. The banks have the same appearance as already described, the left being very steep, and chiefly composed of red earth; I also observed a bank which, on inspection, seemed composed of *slate*. The color of the earth forming the left bank is of various hues, and to a mineralogist might prove interesting. Proceeding four miles along the bed of the river, I reached Salpaun, a small Bheel village on the left bank, and near the junction of the Deo Nuddee (a small and rapid mountain stream) with the Nerbudda. The Deo Nuddee flows from the S. E., and shooting over a rock about forty feet high, forms a pretty fall just before joining the great river. On the opposite or right bank are two handsome temples, lately erected by Dewanjee Wittul Row, which from their situation have a very picturesque appearance.

The Nerbudda at this point assumes a very different appearance to that hitherto described; the stream of the river, from being from sixty to one hundred yards broad suddenly narrows to about sixty feet, and on each side is hemmed in with steep precipices: the middle of the river is also studded with large rocks, and the stream, even at this season, rushes through the intervals with a surprising rapidity, dashing large pieces of wood which were floating down from one side to the other with a force which no boat could have withstood; neither indeed, would it be possible to steer a boat in such a rapid current through such a tortuous and narrow channel. Both banks are precipitous and covered with thick jungle, and all further progress is rendered impossible. I most anxiously desired to visit the Hernpahl, but was told that it was impracticable, unless I went round by Rajpoor; having no time for such an excursion, I determined on returning to Tulluckwarra.

Before taking leave of this part of the country, it may be as well to mention that the inhabitants are all Bheels, principally cultivators. Many are employed also in cutting wood from the jungles near the

river, and floating it down to Chandode and Sinnore. Merchants from these places, and even from Broach, come up as far as Nokri Ghaut to purchase *this* wood. The appearance of these Bheels was wild in the extreme, but they were frank, manly, and hospitable. They appeared miserably poor, and very ignorant.

Their arms were bows and arrows, and their clothing merely a coarse piece of cloth tied round the loins. I was given to understand, however, that the dress of their chiefs was very grand, and I have since obtained a sketch of one, which will give some idea of a chief of the Satpúra range.

There are few tribes of which so little is known as of the Bheels. Their origin is fabulous. It is said "that they are descended from Mahdeo,\* who became enamoured of a beautiful woman, an inhabitant of the forests. A numerous progeny arose from the connection, one of whom, particularly ugly and vicious, distinguished himself by slaying the bull Mahdeo, and was consequently banished to the jungles, and stigmatized by the name of Bheel." So much for the tradition which, like many others, will not bear minute examination.

There are, however, ceremonies performed at certain periods of the year, which seem to have reference to the above, viz. a yearly (Dussera) feast is held by Bheels, at which a buffalo is killed and eaten; at other times they will not eat beef, although they do not scruple to eat carrion and flesh of any other description, in which consists the difference between the Bheels and Coolies — the latter will not thus act. They are said to be the original inhabitants of Marwar and Meywar, and to have been expelled by the Rajpoots; the term Bheel at present seems to mean nothing more than an outcast, since amongst them are found Mahomedans and Hindoos of various castes.

To return to the subject of the Nerbudda. My next object was to discover the most direct road from Tulluckwarra towards that part of the Nerbudda where the river again becomes navigable. I proceeded therefore to Oodepoor via Taujgaum. The road between Bhoderpoor and Oodepoor (chota) is a mass of dense jungle, principally Kakurra and Palmyra trees; it runs along the right bank of the Oursing, and is good the whole way, the soil sandy, the distance measured is thirty-seven miles, and direction N. E. I was here recalled by particular business, and was prevented going on to Rajpoor some distance further; but being anxious to ascertain the na-

\* See History of Central India; the quotation is from memory.

ture of the road between Tulluckwarra and Oodeypoor, I commenced my march for the former, and proceeded, via Boppa Callarane, Karally, Bosna, and No'ysaree, to Tulluckwarra; the whole distance forty eight miles, the road excellent, and not near so much jungle as by the Taujgaum route. The Bheels were the principal inhabitants of the country, and I found them most hospitable and attentive. If I may judge from their surprise at my appearance, I should say that they had seldom, if ever, been visited by an European, for at each village through which I passed, the whole population turned out to gaze at me; the jungle was principally the Kakurra (*Sterculia Fetida*) but abundance of fine large mowah trees, (*Bassia Latifolia*) from the flower of which an intoxicating liquor (called from the tree) is distilled, and in almost every village a Parsee was the distiller.

Having ascertained that there was no difficulty whatever in proceeding by the latter route to Tulluckwarra, and also that with very little trouble water carriage could be procured from Tulluckwarra to Broach, I submitted my report to the Commissioner; but about this time, June 1829, the duties on opium were taken off, and the station of Mhow transferred to Bengal, so that the information I had acquired became of little value. As, however, the part of the country traversed is but little known, this paper, with its accompaniments, may prove acceptable to the Society, and in offering it I have only to regret that it is not more worthy of being presented.

*Extract of a Letter from Major General Sir John Malcolm, G. C. B. to the address of the Supreme Government, dated 11th August, 1820.*

From a memorandum (No. 1) by Mr. Webbe, Revenue Surveyor in the office of Major Williams, it appears that for seven or eight months in the year large boats navigate the Nerbudda as far as Tulluckwarra without any inconvenience; and though they might go ten or twelve miles higher up the river, during a few months, when it is at the highest, I see no advantage in fixing the depot of debarkation above this town, which, from its size, healthiness, and the well cultivated country in its vicinity, is every way calculated for such a purpose.

I have quite established, by the surveys of Lieutenants Hansard and Mathias, that the Nerbudda from the Hern-páhl, or Deer's leap, (as it is locally termed from the narrowness of the channel,) where it enters the broken ridges of the Satpura range to below the fall of Mukree, a short distance above Tulluckwarra, is, from the

rugged nature of its bed, its contracted streams, numerous rapids, and the formation of its banks, incapable of ever being rendered navigable throughout that space. This fact makes it indispensable to proceed by land from Tulluckwarra to some point above the Hernpáhl; and I should fix the place for receiving and protecting such stores and goods at or near Chiculda, from whence they could be re-embarked and conveyed to Moheysir, or, with a short passage of a few hundred yards, at Sahasurdurrah (*or the thousand falls*), to Mundleysir, from whence they go with ease forty or fifty miles higher.

The enclosed memorandum (No. 2) from Lieut. Mathias will show that even in April, when the river was at its lowest, he was able to go from Mundleysir to the Hernpáhl in a small craft, and that he went to Broach from Tulluckwarra in a boat of tolerable size as late as the month of May. The information received by this officer fully confirms that given by Mr. Webbe, as to the size of the boats, (as large as 120 candies or 2400 maunds burthen) employed in the trade between Broach and Tulluckwarra.

Of the practicability of the navigation of the Nerbudda between Chiculda and Mundleysir (with the easy portage noticed) I could have no doubt, from Lieut. Mathias' observations; and I was also acquainted with the fact, that a trade between Chiculda and Moheysir has always been carried on in small boats. But being anxious to establish this point beyond the possibility of doubt, I requested Major Wilson, accompanied by Captain Stewart of the 1st cavalry, to proceed to the Hernpáhl in the end of last month when the small quantity of rain that had fallen rendered the river uncommonly low for the season. The result of the examination of this part of the river was, that with the exception of the portages of Sahasurdurra near Moheysir, where the river from the fall or rather rapids is always very difficult and sometimes dangerous—the navigation between Mundleysir and Chiculda was practicable for light craft for nine or ten months in the year, and Major Wilson further informs me that from his inquiries and from the meteorological observations he has made since he went to Mundleysir, the wind blows throughout this period almost always from the westward, increasing with the monsoon, and enabling boats when the current is at its height of violence to stem it, and to come in two and three, sometimes in one day from Chiculda to Moheysir. The large and rather heavy passage boat in which he went down, came up from Dherl, (near the Hernpáhl,) passing the rapids at Sahasurdurra in four days. But

the river between the Hernpahl and Mundleysir is almost in a straight line, which is a great advantage to the flat bottomed craft, as they have never to shift a sail in coming up, while in going down they are aided by the current, and where that is slow and the water shallow, they are punted.

My attention has been directed to the object of eventually opening the former direct intercourse between Surat and Malwa by Tikree and Sultanpore, but this road has been abandoned for near a century, and the greater part of it is completely overgrown. The country also is desolate, and the few scattered inhabitants are plunderers yet to be reclaimed; some years therefore must elapse before this can be done. The late successful efforts of Captain Briggs in settling the districts of Sultanpore, and the disposition which the Bheels have recently shown to reform, will, no doubt, accelerate its accomplishment, but that cannot effect the utility of the line now proposed, as the distance by land from Surat to Mundleysir by this direct route is not less than two hundred and thirty miles, which is only about fifteen miles shorter than the road by Sindwa, and which has been the common line of communication between Surat and Malwa, during the period the Mahratta Government has been established over the latter province.

#### No. 1.

#### *An Account of the practicability of navigating the Nerbudda from Broach to Tulluckwarra.*

The navigation from Broach to Tulluckwarra is not open until 15 or 20 days after the monsoon sets in, or after the water in the Nerbudda begins to rise, which is generally about the beginning of July; it is first navigated by boats of the burden of 8 to 40 *candies*, some laden and others not; they run up in 4 or 5 days, and sometimes in 3 with a strong *S. W. monsoon* wind, and return heavily laden in much about the same time. When the current is favorable, boats of these burdens can navigate to Tulluckwarra until the Dewallee feast or the month of November, after which the navigation becomes difficult, if not impracticable. Those of 40 *candies* have 5 men in each, and those of 10 to 25, have from 2 to 4 men. These draw when heavily laden from 5 to 3½ feet water. After the month of September, these boats take 15 days to go, having one or two additional hands in each, and return in 6 or 7 days; the current and wind being then against them, they are obliged to track the boat in going up.



After an interval of a few days, and after the Nerbudda has considerably risen, boats of a large burden from 80 candies or 120 candies (which are the largest) leave Broach for *Tulluckwarra* with ten men in each. The trip up and down is performed much about the same time, as by those of a lesser burden. They return heavily laden, and leave this either full or empty. Boats of these burdens can only navigate until September, or October at farthest; they draw about 7 or 8 feet water. These boats go even as far as Dyagaum Peep-lia, which is about 15 or 20 coss higher up, but not always with the same facility as from Broach to Tulluckwarra, on account of the river having a rocky bed, and the current in places being very rapid; besides, there are three ghauts to pass — Tulluckwarra, which is the most difficult, Ukleysir, and Bhimpary. In order to get over these obstacles, the boatmen are obliged to send out long ropes from the end of their mast to be fastened to the trees on the banks of the river, and by this means draw the boat up the stream. This passage is performed in 3 or 5 days, and is the limit that boats have ever ventured; beyond this, navigation is said to be impracticable. Sometimes these boats in returning from Tulluckwarra are interrupted in their progress at the ghauts, which are seven in number. viz. Fol-reeda, Baba, Peara, Gimmaulee, Kundalee, Chaundode, Kunnaulee, Murenda, and Thoomdee: owing to the fall of the river, or by an interval of no rain for 10 days or a fortnight, the boatmen are then under the necessity to lighten the boat, by emptying a part of the cargo into a smaller one along side, and filling it again after passing these ghauts. This is done by getting a villager from the nearest place who understands the channel to proceed in advance of the boat on a small raft or canoe, sounding with a long bamboo for a passage.

All boats that leave for Tulluckwarra have a sloping roof built with bamboos and mats, to preserve the goods from the rain; the larger ones are built up at the sides with the same materials, to prevent the water washing in when deeply laden. These boats are built like all others that are used on this side, having no decks, with one mast and a triangular sail.

Boats from sixty to seventy kulries burden can go to Tulluckwarra after September lightly, but cannot return heavily laden. The tide is felt only as far as Rannapoor, about twenty-five or thirty miles above Broach, where it does not rise a span in height.

It is impossible to fix the dates when the navigation of this river opens and ceases; all depends on the monsoon, and the quantity of

rain that falls inland in the countries through which the Nerbudda takes its course, and the navigation continues as long as there is water sufficient for the boats to float up and down.

The above information is from some of the most intelligent merchants who have traded for thirty years up and down from Tulluckwarra and Dyagaum Peeplia. These men go themselves every year in their boats, and always assist the boatmen in navigating their vessels.

## No. 2.

*Journal of a Voyage down part of the Nerbudda as far as Broach, to ascertain the practicability or impracticability of navigating it, &c.*

Left Mundleysir, on the morning of the 26th March 1820, in an open boat called a Punt, made out of a single tree about twelve feet in length, and twenty inches in breadth, drawing eighteen inches water, with two boatmen, and a small quantity of baggage. From Mundleysir to the Hernpáhl, a distance of thirty miles, there is an uninterrupted navigation for small boats from the commencement of the monsoon till the end of April, and it is then only interrupted in one place three miles below Moheysir, where part of the river falls down a small precipice, and a back stream is then made use of for the small boats, but during the last six weeks of the hot weather, from the shallowness of the river, and the boatmen neglecting to deepen the back stream as the water decreases, it of course becomes dry; but should it ever be required to be made use of during those six weeks, I have no doubt, from the appearance of the place, that a little labor would make it navigable all the year.

From the nature of the rocky bed of the river at the Hernpáhl, I conceive it impossible that the obstacles to navigate it can ever be surmounted, from the circumstance of small ridges of rocks running parallel with each other and the bed of the river, and only distant from twelve to twenty feet; these cause such a rush of water through them, that the boatmen are afraid to pass, being unable to guide the boat clear of the rocks, and one, which I prevailed upon the men with some difficulty to make the attempt with, was upset, and the men were much bruised. But a still greater obstacle exists about a mile below, where nearly the whole water of the Nerbudda rushes into a channel not more than forty yards in breadth, attended with a considerable fall, and with such violence that any boat attempting to pass it would be immediately lost.

Finding myself unable either to proceed along the bed of the river, or in a boat, I determined upon getting down to Haump Island, in the expectation that I should there be able to get boats, and come up the river to the Hernpáhl, and if not, proceed from thence to Broach; for which purpose I returned from Hernpáhl about three miles, and landed on the north bank of the river at the small village of Dhair, and marched nearly due north to Kooksee, along a good cart road, distance ten miles, seven furlongs. From that I went in a north-west direction to Rajpoor, distance twenty-nine miles, one furlong—a good cart road, but the last twenty miles is through a thick jungle. From thence I moved in a southerly direction to Allee Mohun, through an open jungle, distance nine miles, five furlongs, till within two miles of the place, where there commences a deep jungle, with small hills. From that to Moondla, a distance of twelve miles in a south-west direction, through a densely wooded country, in many places well cultivated by Kripour or Bheelala tribes, and thickly studded with large mowah trees. From this I went to Oomtee in a westerly direction ten miles, through a beautiful, cultivated country, with the largest description of mowah trees in great abundance; and from thence to Aump in a south-east direction in ten miles, six furlongs, by the Gore Ghaut, and is throughout a wild hilly and jungly country, cultivated in spots by the Bheelala tribe.

Here I was much disappointed in finding myself unable to proceed in any direction from the nature of the country and rocky bed of the river, and, to my further disappointment, not a boat was to be procured, nor could I hear of one ever having been seen between the Hernpáhl and Mobree, except the punt, or small passage boat at this place, now useless from its decayed state. The bed of the river is here, when full, about two furlongs, but the water is at this time confined within a narrow channel from twenty to forty yards broad. As far as I could see from the highest hill in the neighbourhood, and in one spot that I went to, the channel was not ten yards breadth, the water rushing through it with a slight fall and tremendous force. Nothing now remained but to make Tulluckwarra by the nearest route I could find; but not being able to take my baggage through the hills, I was obliged to go to Kowaut in Guzerat, and only distant from the Gore Ghaut, in a northerly direction, eight miles. From that I went to Barsnie in a south-west direction twenty-one miles, seven furlongs, through a highly cultivated country, thickly studded with mango, mowah, palmyra, and other forest trees; and from this to Tulluckwarra on the Nerbudda, in a south-west direction, is twen-

ty miles, seven furlongs, through an open jungly country. I here again embarked, and went up the river as far as Mokree, distance twenty miles, and there found an insurmountable obstacle to navigation in a fall of the river, which of itself is considerable, but prevents the possibility of a boat ever passing it. I then returned to Tulluckwarra, where I had left my baggage, being unable to take it with me, from the hilly nature of the country. Here I again embarked on the 2d May, but in a larger description of boat, being about thirty feet in length, by three and half in breadth, with a flat bottom; the other I had for my people, was in every respect like an English boat with a keel, &c. and it drew about two and half feet of water, and the only interruption I met with between this and Broach, even at this advanced season of the year, was at the Bawapeers and Tankee Dag Ghauts, where the large boat was detained a few minutes from the shallowness of the water, so that there is an uninterrupted navigation for the largest description of boats that navigate the river, as far as Peeplia, thirteen miles, above Tulluckwarra, during the rains and for two months after it. But from the hilly and broken nature of the country, Tulluckwarra is the highest situation up the river that could be fixed upon as a depot, particularly as there is a good cart road from that to Chiculda, by Barsnie, Oodeypoor and Rajpoor, or by Barsnie, Phoul Mohaul, and Rajpoor, to Kooksee and Chiculda, by that, making the greatest possible distance from the land carriage to Dhavi or Chiculda one hundred and fifteen miles; but several miles would be saved by going to Soosarree, leaving Kooksee on the left hand, and again by not using the more frequented road by Oodeypoor, but that of Phoul Mohaul, from which I have no doubt that the distance of the land carriage would be reduced to a hundred miles from Tulluckwarra to Chiculda, as we become more familiar with the road.

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VII.—*Journal of an Excursion from Morebat\* to Dyreez, the principal town of Dofar.* By C. J. Cruttenden, Esq. I. N.

[Presented by Government.]

At 2 P. M. I left Morebat\* on foot, accompanied by two Bedouins belonging the Beni Gurrah tribe for my guides, and a camel with his driver for the conveyance of my baggage. At a short distance from Morebat is the tomb of Seid Mohammed Agyl, a celebrated piratical chieftain, who some years ago, after a series of depredations in the Red Sea, possessed himself of the province of Dofar, and remained undisputed master of this part of the Coast for about twenty five years. He possessed three square rigged vessels, by one of which an American merchantman was captured, off the Island of Camaran; the crew were all murdered, with the exception of a boy of ten years of age, whom they brought to Dofar, and who, a proselyte to the religion of his captors, is now residing at the village of Sol-lalla with a wife and family. Several books belonging to Seid Mahommed are now in the possession of the Arabs of Dofar. In Dyreez I saw two; one a very beautifully illumined manuscript of the Koran, and the other a series of letters from the commandant of the Turkish forces, when engaged in taking Aden and Loheia, to Sultan Soliman, commonly called the "Magnificent."

Seid Mahommed appears to have held a very high character among the natives, and, though a pirate, to have evinced a desire for the improvement of his country, by the cultivation of the soil and building villages.

About a quarter mile from this tomb is a deep waddy separated from the sea by a sand hill. The Bedouins told me that during the rains this becomes a sheet of water, and that formerly it was connected with the sea, and formed a secure anchorage for boats. The remains of houses and tombs near the spot appear to warrant this assertion, and I was afterwards assured of the fact at Dofar. Leave-

\* The trade of Morebat is now very trifling, and is vested in the hands of two or three merchants who have to pay a kind of tribute to the Bedouins for all imports or exports. At present, only three buggalas belong to the port, and they all trade to India. The principal articles of export are frankincense, myrrh, and a few skins. The latter article, however, is seldom brought to Bombay, as a better market is found in Muscat. The Subahn tree is to be seen in the neighbourhood. It is generally found high up in the mountains. At the ancient town of Hasec I procured a branch with the leaves on it, but could discover no difference between it and the Bochain of Socotra.

ing the sea about a mile on the left, we proceeded along the foot of the hills, across a flat country, well wooded, and affording abundant pasturage for cattle. The hills were clothed with a thick underwood, and amongst the trees I could distinguish several kinds that we found in Socotra.

A walk of two hours and a half brought us to the foot of a waddy, which had been described to me in Morebat as well worth seeing. It is narrow and steep, averaging perhaps a quarter of a mile in width, so thickly wooded that our camel could not proceed, and abounding in fine grass, with a stream of water winding through it. The principal trees are the Lime, Tamarind, Henna (a rather large bush with small leaves, which natives use as a dye for their fingers and feet), Nebbuck, Doom, Tamarisk, the Egsha of Socotra, a few Subahn trees, and an abundance of aloes, together with a small tree of very grotesque form, a sketch of which is annexed.

As we intended dining here, a sheep was killed, and the Bedouins forthwith commenced cooking it in their most approved style; the bones all being taken out, the flesh was thrown in one mass on the fire. As soon as it was tolerably warm through, we all seated ourselves round it; every man cut off the portion that pleased him best, and we were too hungry to be very fastidious. When we had satisfied our appetites, the fragments of the feast were carefully collected and skewered upon sticks, which (along with my shoes) were put into an old water skin to serve for our breakfast on the ensuing morning; a refreshing cup of coffee closed the repast. We proceeded on our journey when the moon rose, and returned to the edge of the waddy for our camel, and travelled over a barren and stony plain till midnight, when we halted under a lime tree in a small village.

The night was bitterly cold, but as three of us slept under my blanket, we kept each other tolerably warm, and the camel served admirably to screen us from the land-wind. At daylight, after finishing the remainder of the sheep, and taking a cup of coffee, we pursued our route over a level table-land, about two hundred feet above the level of the sea, and distant from it perhaps one and half or two miles. The country was stony and barren, affording no pasturage, except at the foot of the hills.

At 11 o'clock we reached Thagah, a small village near the sea. I went immediately to the house of the principal man, to whom I had a letter from a friend of his in Morebat, and nothing could exceed the kindness of my reception. His own bed was brought to

me ; and then, saying that I must be fatigued, and required rest, he left me to repose. Upon awaking, I found dinner ready, consisting of boiled mutton with honey and rice, fare to which I did ample justice. As my kind host *Salem bin Ahmed*, would receive no recompense, I gave a dollar to his slaves ; and at two P. M. accompanied for a short distance by nearly all the towns-people, we pursued our way to Dyreez, the principal town of Dofar.

Thagah is well watered, and possesses a soil sufficiently rich to produce various kinds of grain and vegetables, as wheat, jowaree, dokhun, dholl, &c. The villages at the foot of the hills appeared fertile, and among the higher regions I was assured that figs and grapes are produced. The Bedouins, however, pluck the fruit whilst green, and are too indolent to take any pains with its cultivation. Indigo is also grown in sufficient quantity for the consumption of the natives, who dye their own cloth. The Subahn tree, or Gum Copal is, however, the staple commodity, and is sold in Dofar during the rains, at the rate of about fifty pounds for a dollar. The hills from Morebat Peak or Jibal Decan gradually diminish in height ; they are thickly wooded to their summits, and some of the trees, particularly the Lime and Tamarind, attain a large size. The higher parts of the valleys are inhabited by the Gurrah Bedouins, who bear a very bad character amongst the towns-people as marauders. They are, generally speaking, a fine looking race of people. Leaving Thagah we traversed a fertile country, intersected by large "khores" or sheets of water, which, flowing into the sea, were fresh only at their upper or inland extremities. I observed in one place the remains of a wall and tower apparently too strong to be of Arab construction, and I was told that they belonged to the "Kassers." I was too much pressed for time to go out of my way to examine them, as I was anxious to reach Dyreez before sunset. At 4 P. M. we left the path and descended to the beach, along which we travelled till 8 P. M. when we reached Dyreez, much fatigued with our day's journey.

I had with me a letter of introduction from an inhabitant of Morebat to one of the chief people in Dyreez, to whose house I at once proceeded, and met with as hospitable a reception as at Thagah. The news of the arrival of a "strange man from the sea," quickly spread, and late as it was, the room was soon crowded. Very few of their people had ever seen an Englishman before, and I never saw a better behaved party. On the appearance of dinner they all retired, and I partook of an excellent repast with my host, and the men who had accompanied me from Morebat. After dinner, the

room was again filled with visitors, who kept me up talking till midnight. At daylight I was again roused to breakfast on wheaten cakes, boiled milk, paste made of dokhun flour, and honey, after which I had to sit in state the whole day, explaining to my visitors the use of every thing I had among my baggage. In the afternoon the buggala arrived from Morebat, and on the following evening, after dining with *Abdullah bin Jaffier* the former Hakim of the town, I took leave of my kind host *Ahmakebin Ahmed il Murdoof*, and returned on board much pleased with my excursion and agreeably surprised at the kind treatment I had experienced from people, who bear the worst name on the southern coast of Arabia.

In all our charts Dofar is represented as merely a town; this is, however, not the case. Dofar is a *district* extending from Morebat to Ras-el Ahhmahr, or Bunder Resoot, and contains several villages, all of which were formerly under one Sultan, but since the death of Seid Mahommed bin Agyl, each town has become independent; of these Dyreez is the principal. It is governed by a Hakim, and surrounded by well cultivated lands like Thagah; in fact, in this country, the description of one town is that of all. The next in consequence is *Solahlah*, rather more inland than Dyreez, and distant from it three or four miles. Between Solahlah and the sea lies the town of El Hafah, between which and Dyreez, are the remains of an old town callek El Bellut. A khore winds rounds the back of it, and this place was once the bunder of Dofar. It has now by all accounts, for I was unable to visit it, seven fathoms water, and it would require but little labor to again connect it with the sea. I saw in the mosque at Dyreez several pillars, which had been brought from El Bellut to that place; they were about seven feet high, and of the annexed shape, formed of stone, and regularly hewn and smoothed.

From the accounts of the natives, El Bellut must at one time have been a town of great importance; it was probably built by one of the Min Gooe family, who were the most powerful dynasty of Sultans that ever reigned over Dofar, and who successfully resisted the attempts of the Portuguese to subdue their country. The khore is described as being bordered by a stone pier, on which platforms for guns are still visible. The Hakim of Dyreez appropriates the duties of anchorage, &c. and a rate of two and half per cent, on all imports and exports. Beyond El Hafah lie the villages of El Robaht and Ougkut, and three miles further to the westward the hamlet of Resool, close to a bay of the same, described as a safe anchorage.



The following are the khores that are situated between Morebat and Resool in the province of Dofar :

Khores Rírie, Tahgah, Sivie, Shahl, El Béllut, *fresh*.

Khores Gimaff, El Ghraber, Mistahein, Dyreez, Solahlah, Bin Mish-tan, *salt*. The upper part of these, are said to be fresh.

Dofar produces vegetables of various kinds—gussub, jowaree, dhokhun, dhol, &c. and is abundantly supplied with water. Cotton is also produced in small quantities. Cattle and sheep are cheap and plentiful, and I do not think that any town on the coast is better adapted than Dyreez for supplying of vessels with provisions. The people appear well disposed, and boats can at all times be procured as transports through the surf. The danger of travelling in this interesting country appears to be a mere *bugbear*, and I have been frequently assured that I could safely traverse Hadramaut and Dooan, accompanied by a couple of the Shaik of Shahar's people. In fact, a man from Yemen volunteered to take me with him, and to guarantee my safety. The probable expenses of a journey from Shahar to Shibam would be about two hundred and fifty dollars, and most gladly would I volunteer for the trip. The frequent opportunities of travelling with a Kaffla would considerably diminish any danger to be apprehended from marauding tribes, and I look upon the journey more as an excursion of pleasure than as fraught with any extraordinary danger or difficulty.

The Beni Gurrah Bedouins \* acknowledge no Shaik, and are described as an indolent race, always more willing to plunder than to work. They number about one thousand five hundred men, and are all armed with a sword and stick ( which they carry in the same hand ), and some of them have matchlocks.

The only beast of prey in the plain is the hyena, but antelopes are numerous. Wild cats are found among the hills, and are very destructive to the flocks. The Jubahn trees that I saw were exactly like the Bohain of Socotra, with a light colored smooth bark and short crisped leaves. The season for collecting the gum is in the S. W. Monsoon, when it is brought down to Dyreez for sale. The white is considered the best as not being soiled by contact with the ground. During the S. W. Monsoon, rain is abundant; and at this period all the above mentioned khores communicate with the sea. Throughout Dofar, I was told that rain falls on the average for eighty days in the year.

\* The language of the Gurrah Bedouins assimilates very nearly to that spoken on Socotra. It is so harsh and guttural that it is almost painful to watch a man speaking, and I gave up the attempt to imitate them in despair.

VIII.—*An Account of the tribe of Mhadeo Kolies.* By Captain A. Mackintosh, 27th Regt. Madras Native Infantry; Commanding Ahmednuggur Police Corps.

[Presented by Government.]

*Preliminary and general observations respecting the different tribes of Kolies, and their location.*

Among the various classes of inhabitants within the territory forming the Government of Bombay, the name of few is more familiar to us than that of the tribe of Kolies, more usually written *Cooly* by the English. They are to be found nearly in every part of Guzerat, in several of the districts of which province they constitute a very large proportion of the agricultural population, and in many instances are notorious robbers. They are very numerous in the Attaveesy, and many are settled in the Northern Konkun. In the hilly tract lying between Moosa south-west of Poona and the hill-fort of Trimbuk, the source of the Godavery river, the inhabitants are chiefly Kolies, and a few are scattered over the districts of Candeish, Ahmednuggur, Poona, and Sholapoor, and along the Ballaghaut on the western frontier of the Hyderabad territory.

Although the information we possess of these people must be considered imperfect, I think we may venture to say, that in earlier ages they were the only inhabitants of a portion of Guzerat and of the Attaveesy, for a part of the latter tract of country is termed by the natives Kolwun, or country of the Kolies. Hills, forests, and such formidable barriers will tend to divide communities, and local peculiarities will not only induce new and appropriate names, but will also produce some difference in manners and habits. Notwithstanding these people have, in the course of time, separated into different classes or minor tribes, they continue to retain the general appellation of *Koly*, which affords strong evidence of their being branches of the same stock.

The following are the common designations of the different classes or castes of the tribe of Kolies, and they appear to be located nearly as here described.

The *Raj-Kolies* reside chiefly in the Attaveesy, and in the Wunn Dindory and Nasik pergunnas. A few are settled in the vicinity of Jowair in the Konkun; they are cultivators and laborers. They wor-

ship the gods Khundoba, Bhyroo, and Bhōwany. They say that they have derived their name from the Koly Rajas, who in former ages intermarried with their ancestors, and employed them in their service as domestics and sepoys. The Sir Naik resides at Wagyra in the Nasik district. He holds the village of Vellgaum in free gift, enjoys several perquisites, and settles disputes connected with the infringement of their customs. These Kolies are sometimes called Bhen Kolies, and are said to have originally belonged to the tribe of Mhadeo Kolies, but having committed some irregularities, they abandoned their tribe and associated with Kolies of an inferior description, and at present hold no intercourse with the Mhadeo Kolies.

The *Solesy Kolies* are settled in the same parts of the country as the Raj Kolies. They are also cultivators and laborers. The Solesy Koly is known by the name of Lall Lungoottywalla Koly and Kasthy Koly. They worship Khundoba, &c.

The *Toukry Kolies* are inhabitants of the Attaveesy, principally around Peint and Dhurumpoor. Like the other Kolies, some of them are cultivators and laborers. As the term for a large bamboo is *toukry*, and a number of these Kolies are employed in cutting down bamboos, which are afterwards conveyed to the coast and to the Dukhun for sale, it is said they derive their name from this employment. They worship Khundoba, Bhyroo, &c.

The *Dhour Kolies* are numerous in the Attaveesy, and a few of them are settled in the Wunn Dindory districts. They appear to be the most degraded of all the Koly tribes, and do not hesitate to partake of the flesh of cattle that have died a natural death, and they are at the same time most-determined drunkards. When I was employed in the Attaveesy in 1820, these Dhour Kolies were considered no better than the Dheres (Pariahs) of the detachment with me. The Dhour Kolies are farmers and laborers; some of them are employed in cutting down the teak wood within the districts of the Peint and Wassoonda Rajas, which the timber merchants from the Dukhun purchase from them.

A few enterprising Parsees, who are settled in some of the largest villages on the public roads leading through the Attaveesy, supply the Kolies with abundance of arrack, distilled from the mowah flower. The Koly pays the Parsee in grain for the spirits. In many places the Kolies distil the liquor for their own consumption. These four classes seem to be one and the same people in the Attaveesy; but there appears to be some difference in the manners and habits of

those residing in the Wunn Dindory districts. Their Naiks adjust matters connected with the usages of their tribes.

*The Doonggury Kolies.* A few of these reside in the Attaveesy and the Wunn Dindory districts. They are farmers and laborers, and some of them are employed as the local police of the district. Kolies that reside near hilly districts, are termed occasionally Doonggury Kolies, from Doonggur, a hill.

The *Bheel Kolies* are not by any means numerous; we find one or two families settled in a few of the villages along the banks of the Pera and Godavery rivers. They appear to have been runaways who associated with the Bheels, and subsequently intermarried with them.

*The Mullar Koly.* This Koly seems to be one of the most pure and respectable of all the Koly tribes; they are also known by the name of Panburry Kolies from their employment of supplying villagers and travellers with water. They generally employ buffaloes to carry the pukhall (leather bag) in which the water is contained. The Panburry Koly is a member of the third division of the Bullotta institution, and receives his pay in kind from the villagers for his services. It is his duty to wait on travellers in the employ of Government, and on strangers, to clean out and plaster (with cowdung) the floor of the Dhurumsalla or Chourry, (the public resting place,) to supply them with water, &c. He also attends at all festivals, marriages, &c. in performance of his duty. This Koly is also termed the Choomly Koly from a twisted piece of cloth which he places on the crown of his head, on which he rests his water pot. The same Koly is frequently called the Koonm Koly, from his associating with the Koonbies or cultivators, for they occasionally partake of food at each other's houses. One or more families of the Mullar Kolies are settled almost in every village in the Dukhun and in Candeish, and along the Ballaghaut in the Hyderabad territory extending eastward to Khandhar, Indore and Boden, between the Godavery river and Hyderabad; they are settled in the Ballaghaut (in a south-east direction), in the vicinity of Nulldroog. In many of the villages around and south of Punderpoor, this Koly holds the situation of the village Esskur or Beadle. We find them occasionally employed as sepoy and village watchmen. In villages in the southern portion of Candeish and north of the Godavery river, the Turrall (the person who performs the duty the Panburry Koly does in other parts of the country,) is either of the Dhere or Bheel tribe. A Koly is engaged as his deputy to perform the service, his own low caste not admitting of his doing so. There are a few Mullar Koly Patells of villages in

the Candeish and Ahmednuggur districts. The hereditary Kolies (Naiks?) of the hill-forts of Poorundur, Singhur, Torna, and Rajghur, all south of Poona, are Mullar Kolies; their duties consisted in guarding the approaches leading to the forts, &c.; they held Enam lands, and received regular pay from Government; besides they enjoyed the privilege of cutting grass and firewood, &c. In 1340, A. D. the Singhur Koly Naik resisted the attacks of the army of the Emperor Mahomed Toghluk during several months. A few of these Kolies are settled at Bombay, and along the sea coast as cultivators. They worship Khundoba, Bhyroo, &c.

The *Aheer Koly*. The Kolies of this tribe are inhabitants of Candeish chiefly in the villages along the banks of the Girna river, and on the southern bank of the Taptee; one and two, and sometimes five and ten families are found in those villages. They are very poor, but there are several instances of their holding patellships of villages in the vicinity of Yewull Sakry. It is said they originally came from the south; they are not held in high estimation, for they perform the duties of the village Mhar or Dhere (Pariah), and on this account are entitled to receive the skins of bullocks and buffaloes that die a natural death; they worship the horns of the buffalo which they fix in front of their door. The Aheer Koly is engaged occasionally to perform the duties of the Jaglah or village watchman, and at times one of them is employed as the waterman to supply the inhabitants and travellers with water, &c. In some villages where the members of a family of the Aheer Kolies perform the different duties of the Turrall or village beadle, those of the waterman, as well as those of the Jaglah or watchman, they have been presented by the British Government with from ten to fifteen and twenty to thirty beeghas of land in free gift, according to the size of the village and the responsibility of the duties they had to discharge. The object of this grant was to ensure their becoming more faithful and diligent public servants. They worship all the Hindoo deities, but the goddess Kanby Ranby (a derivative of Bhowany) is an object of great adoration with them. Their marriage ceremony is performed by a Brahman, and usually in front of the shrine of Kanby Ranby; this does away with the necessity of providing a feast for all the guests, &c. so that the expense incurred is trifling. They have two chief Naiks, who adjust matters connected with the affairs of their caste; one of these resides on the banks of the Taptee, and the other near the Girna.

The *Murvy Koly* performs duties in every village in the Northern Konkun, similar to those which the Panburry Koly discharges in the

Dukhun. He receives the Bullotta allowance, and holds a piece of good ground rent free worth a few rupees. There are about a hundred-families of the Murvy Koly at Bombay; they serve as palan-keen bearers, laborers and porters.

The *Sone Kolies* are settled along the coast from Angria's Colaba to Surat. At Bombay and Colaba (Old Woman's Island) there are about two thousand houses of the Sone Kolies; they are all fishermen, with the exception of a few that enter as sailors on board of ships belonging to native merchants. It is said they have a dislike to going on board vessels owned and commanded by Europeans, fearing they should lose caste. They state that they came originally from Angria's Colaba; they follow the profession of arms there, and do duty in the Fort; their chief men are styled Patells. The chief Patell resides at Angria's Colaba; he possesses all the authority of the Goturany, and settles all the disputes and irregularities connected with the infringement of the usages and rules of their caste. The chief Patell has an agent termed Shisha (disciple) in each village or community of the Sone Kolies, who adjusts all disputes of a trifling nature, but important cases are submitted to the chief Patell at Colaba.

Persons proved guilty of adultery and fornication are repudiated from the caste, and not re-admitted, as are offenders who infringe their customs and disregard the authority of the chief Patell. Occasionally a person guilty of vice and immorality, although he may have been perverse, yet, if he subsequently seem very penitent, he is received again by his kinsmen after a large quantity of liquor has been expended, and the greater portion of the assembly have got drunk. In fact, these Kolies seldom or never meet in any number on occasions of congratulation, or of condolence, or for the adjustment of affairs connected with their usages and customs, that they do not drink large quantities of spirits.

Their women, contrary to the usual customs of other Hindoo castes, wear chullies or jackets with long sleeves, and have glass bangles on the left hand only. At the time of their marriage the bangles intended for the right wrist are consecrated, and cast into the sea, on which occasion the spirit of the ocean is invoked in favor of the husband, to preserve her from becoming a widow, while he is traversing the deep in search of a livelihood. As a substitute for the glass bangles thus devoted, three silver ones are worn on the right wrist. Several of these Kolies are said to possess great wealth. There are from five to six hundred families of the Sone Kolies

settled at Bassein ; some of these serve as palankeen bearers ; those at Bombay are all fishermen.

There are a good many of the *Aggry Kolies* settled at Bombay, Bassein, Tanna, and Panwell, also along the coast towards Surat ; these people are boatmen, and serve as sailors on board vessels belonging to Natives. Some of them are palankeen bearers, cultivators and laborers ; their chief Patells settle matters connected with their caste. They worship the god Khundoba, &c.

The *Mettah Kolies* appear to be confined entirely to Bombay, where they have between five and six hundred houses. They are occasionally termed Doongurry Kolies from Doongur a hill, from their residing on the hill or rising ground south of Mazagon, these Kolies having been the first inhabitants, not only of that spot, but of the island of Bombay. In fact, they assert that the place belonged to them in days of yore. They are all fishermen and seamen ; they do not retail their fish themselves, but hand them over to other persons in the bazar. There are persons of considerable wealth among them, who are owners of vessels that trade along the Malabar Coast, navigated by sailors of their own tribe. The head Patells adjust all disputes connected with their caste. Persons proved guilty of adultery and immoral conduct are expelled from the tribe, and are never received back again into the community. These Kolies consume large quantities of liquor at their festivals. The wives of the Mettah Kolies devote the glass bangles of the right hand to the deep, to propitiate the spirit of the ocean for the sake of their husbands, in the same manner the Sone Kolies do, and they replace them with silver ones. They worship Khundoba, Bhyroo, and Bhowany.

In Bombay, Tanna, Bhewndy, Kullian, Bassein, Damaun, &c. we find a people termed by the inhabitants the Christian or Portuguese Koly. It is said that the ancestors of these Christian Kolies were of the tribe of Sone Kolies, and that they were forcibly converted to Christianity some ages ago by the Portuguese. These people are cultivators, extractors of toddy from the palm trees, and others sell fish. They follow the precepts of the Catholic faith, but it appears that some of them have forsaken the true faith and reverted to paganism. This retrogression took place about the years 1820 and 1821. When that terrible scourge the cholera morbus was raging in the Konkun and along the coast, many of these poor ignorant creatures, seeing desolation spread in their families by the heavy visitation which afflicted them, thought they would be much

more fortunate and happy were they to pay their adorations to Devy, Khundoba and Wittoba, than by continuing to do so to the Almighty; a portion of them having accordingly come to this resolution, at once abandoned the true God, and supplicated these false idols to be merciful and kind to them, and to relieve them from the distress by which they were surrounded. They have discontinued all intercourse with their Christian brethren, and have resumed the custom of wearing the sendhy or tuft of hair on the crown of the head. They employ Brahmins at their nuptial ceremonies, but the other Hindoo Kolies, considering them a contaminated race, hold no communication with them. A few of them are cultivators and laborers, while others sell fish, which they cut into small bits and expose for sale in their booths or Thanns in the bazar, and are therefore denominated Thankur Kolies; a few families of them are settled at Bassein, Tanna, and Bhewndy.

There are between three and four hundred families of the Chanchy tribe of Kolies settled at Bombay. These Kolies bear the character of being a very peaceable and industrious race. They are chiefly farmers, who cultivate various sorts of roots, fruits and vegetables, which they take to market; others are laborers, and a few of them are employed in the service of native merchants. These Kolies come from Joonagur (Kattywar) in Guzerat. They worship Dakoorjee (Runchorjee) and Mahaluchmy.

The Kolies in Guzerat appear to be divided into several tribes, the Tullubdah, the Puttunwarria, and the Kakrez, the Dhandhar and Babbriah, &c. The Tullubdah are the most numerous; the limits of their country extend from the Baroda district north to Khyralloo and Massawnah on the banks of the river Roopyne, and from Dholka on the borders of Kattywar to Lunawarra. Some of them are found beyond these limits, but that above defined they consider their own country. Tullubdah, in addition to being the most numerous, is considered superior in rank to the other tribes; the Puttunwarria will partake of food prepared by the Tullubdah, but the latter will not touch food cooked by the former. It is a very common practice with them to call each other by the name of the district in which they reside.

The Kolies in the Mhyee Kaunta are termed the Barriah Kolies, also the Mhyee Kaunta Kolies. Those residing in the pergunna of Dhygown about twenty-five miles north-east of Ahmedabad, are known by the name of Kount Kolies. In the course of time a most numerous and mixed offspring of some degraded Rajpoots have



became incorporated with the Kolies; these people always pass under the general denomination of Koly, but retain as their family designation the original name of the tribe of the Rajpoot parent, or that of the town or district in which they resided at the period of their degradation. The Tullubdah Kolies residing around Kurree, &c., are known by the name of the Chowally Koly, the name of the district. The Thakoors \* of Lohar and Amlyah in this division are Kolies. The Thakoor of Goorapur, twenty-five miles south-east of Ahmedabad, is a Koly of great influence; also the Koly Thakoor of Ometta on the Mhyee. The Thakoors of Aglore Kutawun, Bhukkora, Magoonah in the Chowall, are also Kolies. These Kolies form a very large portion of the population of the districts they reside in. It has been estimated that in the Khaira district alone, there are nearly seventy thousand; they are all cultivators and laborers, and often patells of villages, a few being employed as village watchmen, others by native bankers, &c. The Koly watchmen is termed Wurtunneeah, Pujy, Pugghy, † and Rukha. They hold some land rent-free for their services, and receive other dues. Formerly, and still in many places, the Wurtunneeah is obliged to be on a good understanding with the Geerossy chiefs in their vicinity. The villagers or the Wurtunneeah grant a certain allowance to the Geerossy to refrain from plundering their village.

In almost every second, third or fourth, village there are two or three families known by the name of the Kotewallaha Kolies. They attend on travellers, particularly Government servants to procure such articles for them as they may require. In all the towns there are a few Kolies termed Selottah; these are employed by native bankers in escorting treasure or other valuables, and they accompany travellers from stage to stage for a fixed allowance. Should the Selottah be at enmity with any of his tribe, he will take a sufficient number of his kinsmen with him to protect his charge. When there is danger, the Selottah boldly steps out to face it, and, often has sacrificed his life in defence of his charge. Some years ago the Selottah's services were eagerly sought after, but at present,

\* Rajpoots and Kolies who are the proprietors of several villages, from which they derive a revenue of a few thousand rupees, or who have an income of a similar amount from revenue and other sources, such as geeras or grass, equivalent to black mail, are termed Thakoors.

† The Pugghy is well known as the watchman employed by the officers stationed in Guzerat; he takes his name from tracking the footmarks (Pug, a foot). They are very expert in their profession.

though still ready for employment, their services are seldom called for. In some parts of the country the Koly and Rajpoot Thakoors employ some of their dependents in discharging the duties of the Selottah in escorting property and travellers through their villages.

In every ten or fifteen villages there is a Koly, named the Nathy Patelliah, whose duty it is to adjust any disputes connected with the infringement of their usages. The Nathy Patelliah summons any offender before him, and several Koly Patells and a few elders of the tribe investigate the affair, and fine the delinquent. He is made to furnish an entertainment for a portion of the tribe, and to pay some money according to his means; when he has partaken of food from the same platter with the Nathy Patelliah and some of the others, and has smoked the same hooka with several of the assembly, he is considered as re-admitted into his caste.

They worship Mahadeo, Bhowany, Ambyka, Devy, Botcherra (Mattah) and Runchore (Krishna) and Ilunooman. Of all these Botcherra or Betchurra, the goddess who presides over the small-pox, seems to meet with the greatest attention from these people. The most sacred and binding of their oaths is that taken when the hand is placed on this idol; another very binding mode of pledging their faith, is by filling a brass or copper cup with water, and placing their hands on it and repeating the names of all the gods; this they term Pruvopyah.

When any serious quarrel or feud has been settled between these Kolies, they seal their reconciliation by drinking some kaossoomb, which is merely a little opium dissolved in water. They are partial to opium, and very fond of spirituous liquors; they are enterprising, bold, and most desperate thieves and plunderers, yet they seldom commit murder unless they are attacked, or resistance is offered to them.

The Puttunwarria Kolies reside in the district around Puttun and between the Surruswutty and Bunnass rivers. I have mentioned before that they do not rank so high as the Tullubdah Kolies; this is on account of their partaking of the flesh of buffaloes. They are dispersed over the southern districts of Guzerat to the vicinity of the Nerbudda, and in many places they are numerous. They are cultivators and laborers, and occasionally employed as watchmen of villages, &c. They worship the same gods as the Tullubdahs, and differ little from them in respect to character. The Kakrez Kolies inhabit the district of that name to the north-west of the Bunnass river. They are numerous, bold, and enterprising plunderers. The

Dhandhar Kolies reside in the district of that name, of which Phalanpoor is the chief town. They are a daring and wild people. The Babbriah Kolies occupy the southern portion of the peninsula of Kattywar.

*Tract occupied by the Mhadeo Kolies, and their origin.*

In the following pages I purpose giving an account of the tribe of Mhadeo Kolies, who reside in the valleys on the east side of the Syhadry range of mountains extending from Moosa south west of Poona, northward to Trimbuk the source of the Godavery river, and lying between the  $17\frac{1}{2}$  and the  $18^{\circ}$  degrees of north latitude and  $73\frac{1}{2}$  and  $74$  east longitude.

These small valleys are formed by masses or groups of rugged hills of the less lofty ranges that diverge laterally in an easterly direction from the main chain of mountains. These are known to the inhabitants by the names of Mawills, Khoras, Nahirs, and Dangs, that is, valleys, glens, straths, and wilds. They vary considerably in configuration and extent, and at the distance of ten, fifteen, and twenty miles from the crest of the Syhadry range, they gradually expand into the spacious plains of the Dukhun, where the collateral branches and groups of hills within the before defined limits may be said to terminate, with the exception of the low irregular branch that protrudes from the north of Joonere and runs along to the south of the Moola river, but diverges much in its advance to Ahmednuggur, after which it stretches in a south-east direction, and ultimately constitutes the Balaghaut of the western boundary of the Hyderabad territory. The chief gorges or passes in the principal range leading down from the Dukhun to the Konkun, and the bottom of the different valleys, may average from 1800 to 2000 feet above the level of the sea; and the most elevated points in the main range may vary from 4000 to 4500 feet. The summit of the Kullsabaie hill, one of the detached branches and only a few miles from the forts of Allung and Koorung, rises to the height of 5500 feet; and is considered the highest land in the Dukhun. Many of these lofty isolated and rocky hills were selected by the rulers of the country some centuries ago, as fit situations for fortresses; and as the sides of the hills were in general very steep, indeed often quite perpendicular, it was only necessary to erect a gateway and fortify this entrance to render the place almost impregnable.

These numerous hill forts,\* with a few exceptions, have been dismantled by the British, as they were considered useless and expensive. The original object of establishing such strongholds might have been twofold. First, as the cost of fortifying such places must have been comparatively very small, hills suitable for the purpose in the vicinity of large open towns or villages were fortified to afford the inhabitants an asylum to retire to, should a formidable body of plunderers threaten to overrun the country. Secondly, the intention of erecting some of the hills of a mountainous tract into fortresses might have been to guard passes leading from one province into another, or to overawe the population; for we know that the inhabitants of the hilly country are a very independent and intractable people.

The inhabitants of many of the villages in these valleys suffer very great inconvenience during the months of April and May, from the great scarcity of water, yet the fortified hills were supplied abundantly with the finest description of this necessary of life. Tanks or reservoirs were excavated in the rocky summits of the hills where appearances indicated the presence of water; in these excavations it frequently becomes necessary to form portions of the rock into pillars to support the roof of the tank.

It is to be noticed that the acclivity on the western side of the Syhadry range is always abrupt and very steep; here especially, as well as among some of the other groups of hills, there are many grand chasms with rocky walls several hundred feet in depth. In these immense ravines, and on the summits of the hills and Puthars or plateaux, there are numerous plants, shrubs and beautiful trees. In many

\* As I was employed after the termination of the last Mahratta war in dismantling the hill-forts, I can bear testimony to the general salubrity of many of these lofty dwellings, notwithstanding their very bleak and dreary situation, especially during the monsoon, when that terrible scourge the cholera was spreading desolation in the villages in the plains at the bottom of the forts, and more particularly those situated in low and confined situations. In the years 1818 and 1819, I had charge of five hundred sibundies (irregular troops) stationed in hill forts; of this body there were only two men of the garrison of Anky Tanky died of cholera. A party of sibundies stationed at that fort went to a village in the vicinity to procure some supplies; they slept below one night, and in the course of three days afterwards the men alluded to were seized with the disease and expired. I may add that out of two hundred workmen that were employed destroying the fort, about twenty of them slept below in the plain, as their families had joined them, while the others slept under trees on the hill or in caves; the cholera on one occasion attacked several of those that remained below, and one of them fell a victim to it.

places in hollows and on the Puthars there are dense and extensive patches of lofty jungle and forest timber, with thickets of impervious brushwood, particularly southwest of Joonere and around Ambygown. A variety of wild animals inhabit these jungles; tigers, cheetas, hyenas, bears, wild cats, hogs, kollussnas \* (wild dogs), jackals, gowas (bison), samburs, neelgaie, spotted deer, antelopes, bhek-kurs, and monkeys; also hares, peafowl and jungle fowls, with many birds small and large of rare and variegated plumage.

Exclusive of the principal passes in the western ghauts, there are numerous footpaths leading over the mountains from the Koly habitations above, to the villages below in the Konkun. These paths

\* The animal termed by us the wild dog is known to the natives by the name of Kollussna, Kollussra, and Kollussa; it is common in the Kotool district and all along the range of western ghauts. It is about the size of a panther, with very powerful fore quarters, narrow tapering loins, black and pointed muzzle, and small erect ears. The tail is long, and at the extremity there is a bunch of hair, several inches in length. The Kollussna is of a darkish red color, possesses great speed, and hunts in packs of five, eight, fifteen and even to the number of twenty-five, and is extremely active, artful and cunning in mastering his prey. It is during the night time they move about in search of food, but should an animal approach near them an hour or two after sunrise, or a short time before sunset they will attack it. All animals seem instinctively to dread them; during the day time they remain quiet in their hiding places. When the Kollussa discovers an animal worthy of being captured, the circumstance is announced to the members of the pack by a barking or whistling noise; the others are on the alert, advance rapidly and post themselves slyly round the spot; after which they gradually close in on the animal, who upon seeing one or two of the Kollussnas, gets frightened, but much more so when running away at speed he encounters one of his enemies in whichever direction he attempts to escape. The consequence is that he gets so agitated that he stands still for some seconds; the Kollussnas seeing his confusion, run in close to him, pull the animal down, and tear him to pieces.

When few in number they have been known to gratify their hunger before the poor animal fell down or expired, each of them tearing away a mouth-full while the animal remained standing. There are very few instances of their ever having attacked the villager's cattle, but they will kill strayed calves if they fall in with them. The Kolies never molest the Kollussnas; in fact they are glad to see them in their neighbourhood, being aware of the enmity that exists between them and the tiger, for they kill tigers occasionally, and in consequence they are considered by the people as the protectors of their cattle and their fields; for neither sambur, deer, or hog, seem much disposed to approach places much frequented by the Kollussna; they hunt and kill the sambur, neelgaie, hyena, deer, jackals, hares, hogs, bears, porcupines, and quails. They killed a tiger in June last year in the Teloongun jungles.

are very intricate, and it is with much difficulty the people travel along them when loaded with the produce of their fields for the bazars on market days. Where the rock is very precipitous they use a simple bamboo \* ladder, which enables them to effect their passage by the most direct routes.

During the southwest monsoon, which in general sets in about the end of May or first fortnight in June, during intervals when the rain ceases pouring down, not only the summit of the mountains, but the valleys are enveloped in general in a very dense fog, consequently there is always a damp and chilling sensation in the atmosphere at this period. While the heat during the months of April and May is often extremely sultry and oppressive below, it is comparatively cool on the tops of the hills. It may be observed that the degree of the atmospherical heat as indicated by our thermometers at times in such situations, is an imperfect measure of sensible heat. The climate is unhealthy after the termination of the monsoon; and the inhabitants suffer much from fever and ague in the months of September, October and November.

The population of the tract just described consists of Thakoors, † some Hutgur and Telwur Kanaras, and a few Bunjaries, in addition to the Kolies, ‡ including also some Koonbies, who have intruded themselves within a few ages past.

The following is given as the popular tale of the origin of the Kolies. After the death of one of the Rajas of the race of the sun, named Raja Venn, (an account of whom is given in the Bhagwut Pooran,) a man of a dwarfish size sprung from his left arm. He was called Neeshad (base born), and directed by some saint to take up his residence among mountains and forests; he consequently was the ancestor of all Keerants § or the barbarous and savage people who inhabit wild places and subsist by the chase. One of the descendants of Neeshad and a female Shoodur were the parents of the Poolkuss; and a male of the Neeshad lineage and a female of the Poolkuss

\* They place a substantial bamboo divested of its branches, leaving a small stump at each joint or division to be used as a step.

† A short account of these people will be communicated in a separate paper hereafter.

‡ There are some Mhadeo Kolies settled around Jowair in the Konkun. The Raja of Jowair is a Koly. There are some of the same tribe in Bombay.

§ Keerants, Poolinda and Shubbur, are the Sanskrit terms applied to the Bheels and other wild hilly tribes.

family were the parents of the Koly. He was to subsist by killing whatever animals he encountered in the jungles and forests. It may further be stated that the Kolies say, that they are descendants of Valmiki, the distinguished author of the Ramayun, who, although of Brahmun parentage, and born at Veer Wylla, twenty-four miles south-east of Poona, is said to have led the life of a Koly. The description of Valmiki magnifies him into a huge giant, who could walk fifty miles in less than half an hour. He is reputed to have been a most desperate and remorseless robber and murderer, and that he continued so until he encountered the holy Narud, who ultimately succeeded in persuading him to abandon the wicked life he was leading for a better and more virtuous one. The Mandur Soombah Ghaut, ten miles north of Ahmednuggur, and close to that beautiful and romantic spot known to us by the name of the "happy valley," is said to have been one of his favourite haunts.

The Sanskrit word Kywurtuk, meaning a boatman and fisherman, is applied by some of the inhabitants \* to the Kolies, but in the Duk-

\* The Mahomedans, and a great many of the Hindoos, are very apt to apply the term Koly to persons of various low tribes respecting whose origin and habits they may be ignorant. There is a class of people known by the name of Tarroo, who are boatmen at the ferries of the Godavery, &c. and although they are quite a distinct class and not very numerous, through ignorance some persons call them Kolies. In the country to the north and to the west of Hyderabad, there are several tribes of low caste people who resemble the Kolies in some respects; one of the most numerous of these are the people known by the name of Mootrassy. When they cultivate and work as laborers they are called Mootrassy. Those that superintend water-courses and tanks to see the regulated quantity of water supplied to the people, are termed Neerrorrahs, and those that follow a military life are called Tellgolls, which is the familiar word among them for an armed man. The Tellgolls are much employed as sepoy (hereditary) in the service of the Naiks or Zameendars in the Hyderabad territory, and they hold a considerable portion of land rent-free, for their service, which is cultivated by some of the family; besides, they receive dues from the inhabitants for performing the police duties of villages, and are employed in collecting the revenue and on "field service," when the Naik is engaged in hostilities, even should it be with the ruling authority of the country, on which occasions the Tellgolls were frequently in the habit of sending their families to the jungles for protection, while they showed the greatest zeal and most devoted attachment in the Naik's cause. Some of these people were formerly employed in the Poona Subsidiary Force, as pioneers, lascars, and dooly bearers. A few of them are settled at Poona and Seroor as palankeen bearers. The Mootrassy passes under the denomination of Kamatty at Poona and Seroor. The word Kamatty is applied by the inhabitants of the Mahratta country to all description of persons coming from the Ballaghaut and the

hence it is unusual to see the Kolies engaged as boatmen. A very few of them from necessity may in some places follow the profession for a month or for a season, as the Koonbies, Mallies, Bhooies, Dheres, and Mahomedans do. Neither is it common for Kolies in Guzerat to labor as boatmen; the term might be more appositely applied to the Kolies along the sea coast. There are several hundred families of the Dhewur tribe of boatmen settled in the towns and villages on the banks of the Godavary river between Nassik and Gungakhare; they state that their ancestors came from Bundelkund in Hindoostan. They worship the god Rama, and relate a miraculous story respecting their own origin. They say that they are not Kolies; the terms Dhewur and Kywurtuk are synonymous, and the Poorans state that they are the offspring of a Pursovah, a goldsmith, and an Eeogvhy or female Patruwut (a hewer of stones), who are to be employed as boatmen at ferries on large rivers. A few of them are employed at Ahmednugger and Poona as palaukeen bearers.

The tribe of Mhadeo Kolies is divided into twenty-four Kools or grand divisions; each of these is again subdivided into branches or classes, amounting in all at present to about two hundred and eighty; each of these classes comprise many families bearing the same surname. The number varies according to circumstances.

The following are the names of the Kools of the Mhadeo tribe of Kolies, with the number of clans or branches that have diverged from each.

The Wanukpall; from this have sprung .....	17	The Polewoss; from this have sprung .....	12
The Kuddum .....	16	The Oottarracha ....	13
The Puwar .....	13	The Dullvy .....	14
The Keddar .....	15	The Gouilly .....	2
The Boodywunt .....	17	The Agghassy .....	3
The Namdeo .....	15	The Chowan .....	2
The Kheersagur .....	15	The Dojajy .....	12
The Bhagywunt .....	14	The Sagur .....	12
The Bhonsala .....	16	The Shaikacha Shesha ....	12

Hydrabad country, who can speak Telinga. Koonbies, Mallies and even Mahomedans are classed under the head of Kamatty. The Mahomedans in the country around Commumait, Nullgoonda, and Pochumchilloo, apply the term Koly to the Tellgolls. They worship all the Hindoo gods under the Telinga names of Erranah (Mhadoo), Ellamah (Bhowany), and Pochuma (Matta Devy); but their chief object of adoration is Noresinga, the man lion, being the fourth Avatar of Vishnoo.



<b>The Ingtab .....</b> 13 <b>The Gykwar .....</b> 12 <b>The Sooryvounssy.....</b> 16	<b>The Khūrad.....</b> 11 <b>The Seerkhy .....</b> 2 <b>The Sew .....</b> 9
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Although it is impossible to ascertain who the original founders of each Kool or grand division might have been, we are, however, supported by traditionary evidence in stating that persons of rank, or influence in former ages, from necessity, choice, or other cause, joined the Koly community occasionally, and became in such case the founder of a new Kool.

Were we to judge from the similarity which some of the names of the twenty-four Kools bear to the present Koonby surnames, we might feel inclined to conclude that the Kuddum, Gykwar, Puwar, Jugtab, &c., were apostate Koonbies, who had joined the Kolies, but then it is to be recollected that these surnames are common to all the families of the very lowest classes of the community. The Chowan Kool is thought to be of Rajpoot origin, and the Namdeo Kool, it is conjectured, must have been founded by one of the Mahratta Namdeo Simpies, or tailors, as they are the only Kolies who abstain from killing sheep at their weddings, following the example of the Namdeo Simpies in this respect, who do not partake of animal food during the nuptial ceremonies, although they offer propitiatory sacrifices to the gods some days previously. One of the members of the Memony family of the Kheersagur Kool, who are patells of the village of Kheerysur in Mhur Khora, some four or five generations back received a Bunjara boy into his family and adopted him as his son, the boy taking the name of Memony; this circumstance has been the cause of much strife among the members of the family, as the descendants of the Bunjara claim the patellship, while the lineal descendants deny their right, and upbraid them with the nature of their origin.

It appears nineteen of the original names of the persons who were the founders of the different Kools of this tribe have, in the course of time, become extinct; yet the numerous clans who have respectively sprung from each of them, carefully retain and cherish the name of their original founder. The Mhadeo Kolies are peculiarly tenacious of the Hindoo usages in adhering strictly to established rule in forming their matrimonial connexions, for it is only persons of different Kools that can be united in marriage; those of the same Kool, or original family stock, are prohibited intermarrying. It is a common observation that were persons of the same Kool to marry, the circumstance would entail much unhappiness and misery

on the parties, and that their offspring would never thrive. I know an instance of such an irregular marriage, and it is rumoured that the couple are very unhappy and have no children ; the mistake occurred by the parties omitting to institute the necessary inquiries at the proper time.

*Estimated number of the Tribe ; their Patells ; Revenue System ;  
and the grains cultivated by them.*

It is said the Kolies were much more numerous about seventy years ago than they are at present ; that many of them were destroyed during the various disturbances that have taken place since, and by the famine that occurred in 1803-4, and latterly by the cholera morbus. To afford a better idea of the amount of the Koly population at present, and to show how they are dispersed over the hilly tract, I will give the estimated number of their houses in each valley and glen.

There is reason to suppose that they were numerous in former times around Poona, and in the valleys south of Loghur fort ; but in the valley of the Moossa Khora, they have only thirty houses, and forty houses in the Puwun Mawill ; all of these are Oopry\* cultivators and laborers, there being no Koly Thullkurries or Wuttundurs so far south at present.

In the Andur Mawill there are sixty Koly houses ; they are the patells of two villages, and share the patellship of two others with the Koonbies.

In the Nana Mawill the Kolies have a hundred houses ; they hold a share of the patellship of several villages, and the Heemarra Koly Naik with ten men is employed in the police.

In the Bhaum Nahir the Kolies have forty-five houses, and they hold a share of the patellship of two villages ; but the Koonbies who hold the other are in a fair way of gaining the Kolies share by forcing them from their houses. Much intrigue and villany is often exercised among these people on such occasions. The Mettull clan of the Kedar Kool is the most common in this strath.

The Kolies residing in four villages in the Khora Barrah and Arrull Khora have about eighty-five houses, they hold half the share of the patellship of two villages ; the Koonbies hold the other. It is said that it is only very lately the Koonbies have unjustly secured the share of the patellship for themselves ; the Koonby who now

\*Oopry, a tenant, or one having no property in the soil, whereas Thullkury means one that has a right in the lands he cultivates.

holds the patellship of Kheirpoor is a nephew of the Desmook (head of the district); he only took up his residence in the village a short time ago, for the purpose of grazing his cattle in the adjoining jungles. Although the title and a share of the office of patell was conferred upon him, no enam land could be granted without the sanction of the Government authorities; however, as the village Chouglā had died without any heirs, the Desmook transferred his enam land to the new Koonby patell. The Parday clan of the Gykwar Kool is the most numerous in this glen.

In Bheem Nahir, the Koonbies are the only inhabitants of nine small villages, and in nine other villages they and the Kolies hold each a share of the patellship. The Koonby patell takes the precedence of the Koly patell in all village affairs, which is a source of great vexation and complaint to the Kolies, as they declare the Koonbies have unjustly taken possession of these situations. The number of Koly houses here is estimated at two hundred and eighty eight, and the names of the Langly, Murkhy and Nangry, families are the most numerous.

In the Ghore Nahir, or valley of the Ghore river, and in the Ambygown quarter, there is a great deal of jungle. The Kolies are more numerous here; in forty villages they have nearly one thousand houses, and hold the entire patellship of thirty-five villages, and share that of five others with the Koonbies.

Three very small villages have been deserted in this quarter within the last six years; in two of these there were only a very few inhabitants, and as they had suffered much from sickness, they quitted the place. The third was deserted owing to a boundary dispute not having been satisfactorily adjusted. In the quarter called Ghora of this valley, there are one hundred Koly houses in six villages, and in one village they continue to retain a share of the patellship. The Lokriah, Assaully, and Bendang clans are the most numerous in this valley.

In Meen Nahir there are there hundred and twenty-one Koly houses in seventeen villages. The Kolies hold the entire patellship of eleven of these; the patellship of five others they share with the Koonbies, and that of one is shared with a Mussulman. They are constantly squabbling about precedence. The most common family names in this strath are the Neegly Silkunda, Ballcheem, Borrorry, &c.

In the Kookur Nahir the Kolies are the sole patells of thirteen villages, and they share that of eight with the Koonbies; the num-

ber of their houses amounts to three hundred and sixteen. The Sablah, Naggry, Dewtah, &c. Are the most common family names in this strath.

Mhur Khora. The Kolies are the only inhabitants of five of these villages, of which they are patells; in four of the other villages there are a good many Koonbies, but the Kolies are the patells, with the exception of one, which they share with the Koonbies. In the village of Peeplegown the Koonby Jumdarry is the sole patell. The family of Bhokkur, notorious among the Kolies, hold the patellship of this place, and resided here. It is known by the name of Peeplegown Bhokkur. It is said that the Bhokkur Naik fled during an insurrection of the Kolies when Nana Phurnavees was minister, and that the ancestors of the present Koonby patell contrived then to secure the situation for himself. The present Koly Naik continues to claim the patellship. There are one hundred and sixty-four Koly houses in this glen. The Bhokkur Koly Naik of Mhur Khora, with twenty-five Kolies, has charge of the Police of Meen Nahir, Kookur, Nahir and Mhur Khora.

In the Ootloor quarter the Kolies are the sole occupiers of ten villages of which they are the patells, and they share the patellship of twelve others with the Koonbies. In the twenty-two villages there are three hundred and ninety-four Koly houses. Diggy Mally and Gondky are the most common family names.

In the Kotool Dang there are eight hundred and forty Koly houses in thirty-two villages, and they are the patells of twenty-nine villages. In the Kotool Puthar (plateau) and adjoining villages, there are two hundred Koly houses. In all there are about one hundred and forty houses. Bhauggrah, Mootah and Heelah are the most common family names.

In the Rajoor Dang the Kolies inhabit thirty-six villages, and they hold the patellship of thirty-five of these, and share that of the Kusba of Rajoor (the market town) with the Bunjaras who are settled there. The Desmook of this district is a Koly, (the family intermarry with the Rajas of Jowair,) the surname Peechur, and the Bhauggrah family of Ekdurrah have been the Naikwarries for ages past. The number of Koly houses is estimated at nine hundred and ninety-two, and the Bhauggrah, Peechur, Kudally &c. are the most common names in the district.

In the twelve villages of Putta (under the forts of Ounda Putta) the number of Koly houses is about one hundred and sixty-three, and they hold the patellship of six villages; the most common family names are the Tullparah, Duglah and Sablah.

In Malldesh the Kolies inhabit three villages of the Tukeed Khora, of which they are the patells ; and they hold half the patellship of two others. They have two hundred and sixty-nine houses in this glen.

In the Kounnaie Khora the Kolies have two hundred houses ; they hold the entire patellship of seven villages, and share that of another with the Thakoors. The surnames Perrykur, Khuttela, Gubbala are the most common.

In the Dharrun Khora the Kolies are the patells of five villages, and hold half of that of another, they have two hundred and sixty-two houses.

In the Oondhwole Khora the Koly houses amount to about two hundred and seventeen. They share the patellship of six villages, with the Koonbies.

To the south of the hillfort of Trimbuk, in fourteen villages the Koly houses amount to two hundred and twenty-eight ; they are the sole patells of eight villages ; they share the patellship of two others with the Thakoors, and one with the Telwur Kanaras. Gondky and Wagh are the names of the most numerous clans.

In the town of Trimbuk and neighbouring villages there are about two hundred and fifty Koly houses of the Mhadeo tribe ; here some families of the Koly tribes from the northward are settled.

In the town of Nassik and its vicinity there are about two hundred houses of the Mhadeo Kolies, and in and around the town of Sinure about one hundred ; and about one hundred more settled in and around the town of Ankolla. In the Konkun, chiefly in the Jowair district, there may be about two thousand five hundred houses, and it is supposed that the Mhadeo Kolies, who are settled in Bombay as laborers, &c. have about one thousand houses there.

From the above we find that there are in the Dukhun  
about houses. . . . . 6895

In the Konkun and Bombay. . . . . 3500

In all about houses 10395

As two and three families reside frequently in the same house, if we take the average number at five persons for each, it will give us upwards of fifty thousand souls composing this tribe.

The Koly patell, or the head person of the village community has to perform the same duties in their small villages and hamlets, that the same officer has to execute in other parts of the country ; they

have to lend assistance in collecting the revenue and other dues from the inhabitants of their villages, and to aid the police in their magisterial capacity. For the performance of this duty they are remunerated by a grant of rent-free land, termed *Passoury*, \*which varies in quantity from about one hundred begahs to a half, a third, or a quarter of that extent, according to the size of the village and supposed responsibility of the Patell. He also holds a portion of *Mee-rassy* land, for which he pays rent.

From the inhabitants he receives the following perquisites or dues ; every householder presents him with one fowl annually, and every farmer gives him one seer of ghee. If the farmer is very poor, the Patell will be satisfied with a half or quarter seer. Each farmer presents the *Wannalla* (a sort of friendly offering) at the harvest time ; this is a little of the produce of his fields, which may be about a paillie or four seers. Should the farmer have a large quantity of rice, *Nagly* and *Khoorachny*, the Patell will take about four seers of each, and one or two seers of any other grain he may have grown. In such villages or *Kusbas* where fairs or markets are held once or twice a week, the Patell is entitled to a small quantity of the vegetables and fruits brought for sale. If there is a *Bunniah* (a grocer) in the village, he presents one *soopary* [betel] nut and a little tobacco daily to the Patell; but he has to send for them. The Patell receives one seer of coarse sugar at the *Dussera*, *Hooly*, *De-wally*, and a few other festivals.

The Patell's rank entitles him to the *Maun* or precedence at all public ceremonies connected with their customs and habits. If there be a *Moochy* in the village, he must present the Patell with a pair of shoes annually at the *Dussera*; on the occasion of a marriage and the naming of a child, the Patell receives a *soopary* nut. When the sheep at the *Dussera* is sacrificed, he begins the ceremony. Also in the month of *Jesth*, when the villagers kill a young buffalo to propitiate *Bhowany*, the Patell goes through the ceremony of wounding the animal slightly (in any part of the body) with his sword. He is entitled to certain services from the village *Mhars*.

The *Desmook* of the district enjoys a few begahs of land rent-free, and receives a *Bhent* rupee from each village in his district; besides, he manages to get an additional rupee from each as a substitute for a *Passoury*, which he solicits the people to give him. One seer of

\* *Passoury* means two pieces of cloth that are stitched together at the sides, and then doubled over and stitched all around, and used as a wrapper for presents.

ghee and a fowl are also presented to him annually by each village, as well as the Wannella of rice, varying from four to sixteen seers, according to the size of the place. He receives from Government three per cent. on the revenue of each village. The Desmook sends a sepoy to the different villages for these articles, and they are transported to his house by the village Mhars.

The Desmooks originally were the hereditary collectors of the revenue of their respective districts, which they paid into the Government treasuries. Owing, however, to their great dishonesty, and having been guilty of embezzlement and corruption in the performance of their duties, they do not appear to have been employed in the fiscal department for a very great number of years. As they are in general very intelligent persons, and possess much influence in their districts, I suggested to Government, about six years ago, the advantages likely to arise from engaging their services to some extent in aiding the police of their districts, thinking them fit instruments to be employed in assisting the Government agents in maintaining the tranquillity of the parts of the country in which they resided, to prevent gang-robberies. Lately they have been called upon to communicate information respecting the state of cultivation in their district, and to encourage the extension of it.

The office of Naikwary of Rajoor has been held for many generations by the Bhauggrah Koly family of Ekdurrah. This appointment was instituted for the purpose of watching the agricultural interests of the district. The Naikwary was constantly on the move, visiting every village within his range that the cultivation was not neglected.

As perquisites, the Naikwary received from ninety to twenty-four seers of grain from each village according to its size; also a seer of ghee, a fowl, and one rupee in cash. The Naikwary's services having been dispensed with, the dues of their office are no longer received, but some of them occasionally endeavour to levy a few annas or a rupee from the people.

The inhabitants of this part of the country (Rajoor, Malldesh, &c.) assert, that their village lands were never measured, that the size of the patches of arable land was determined merely by estimation, and a certain number of these patches or Thikkas according to their dimensions, were considered to constitute a *chour*, or measure of one hundred and twenty *begahs* of land.

The Revenue is therefore adjusted according to the *ooktty* or contract principle, but several modes exist under this head. First the

"Thikka bundy system," or patches of an estimated size and value; secondly "the outh bundy," or quantity cultivated with a plough, either with two, four, or six, bullocks. Thirdly "the Dullie," or plots of ground cleared and prepared by means of the hoe or Koitta.

A few poor Kolies (but much more frequently the Thakoors) cultivate small patches of ground with the hoe or Koitta on the summits or declivities of the hills that are inaccessible to the plough; this the people term Dullie. The ordinary rent levied from a man for the extent of ground he can cultivate with the hoe, is one rupee, and from a woman, half a rupee, annually. If the man and woman labor together, and the spot they cultivate is rather open and the soil tolerably good, they will have to pay two, and sometimes three, rupees. In the months of December and January they cut down the trees and bushes in particular spots on the summits and declivities of many of the hills; and when these have partly withered, and the surrounding grass has become quite dry in the hot weather, they set fire to it, and after the first fall of rain, generally in June, when they have had a few fair days, they sow Nagly, Koorachny, Sawa, and Wurraie, broad cast. They endeavour to cover the seed with the ashes and a little earth by scratching and drawing lines in a zigzag manner with the hoe.

*The outh bundy system.* As the ground has not been measured, the Kolies sometimes pay their rents according to the quality of the soil, and the quantity they can cultivate with a plough with four bullocks. For the best description of soil they will pay twenty-eight rupees annually, for medium soil they will pay from eighteen to twenty-two rupees, and for the third or inferior sort, they will sometimes only pay from eight and ten to twelve rupees. With a plough of four bullocks a man will cultivate from thirty to forty begahs of land. A plough with two bullocks will of course only have to pay half of the above rates, while one with six bullocks will have to pay half as much more as stated above.

In the low ground and along the banks of rivers or streams, there are patches of land composed entirely of black earth, and others of different mixtures which vary much in quality; these are frequently classed under the term Thikka, as well as the Mallzumeen, (that is, the more elevated, less fertile, stony, red soil clear of jungle,) but the most productive and valuable lands are the Thikkas, which have been divided into Bhautt Churries, or rice fields chiefly formed by artificial means, on the sides of some of the more shelving and gently sloping hills, and in small ravines or gullies.



The finer and better varieties of rice which are so much esteemed and prized by Brahmuns and wealthy natives, are grown in the greatest perfection in these fields. The owners of these Thikkas that are divided into Bhautt Churries are allowed to cultivate a certain portion of the adjoining Mallzumeen as they pay no rent for the usufruct of it, the cess on, the Bhautt Churry originally including such an arrangement. The rent of each Thikka varies from two to ten rupees, all depending on the estimated size, &c. of the different plots.

Should a poor Koly for want of means forego cultivating his Bhautt Churry, he will very likely cultivate a portion of the Mallzumeen attached to it, for which he will pay two or three rupees. All the Bhautt Churry Thikkas, as well as those of the Mallzumeen, &c. have names of long standing; the rent of each plot has never been altered within the memory of man.

During the period when that benefactor to his country, and most able and intelligent minister, Nana Phurnavees, had the management of affairs in the Mahratta Government at Poona, he issued orders to the revenue officers to hold out every inducement to the Kolies and other inhabitants of the hilly country, to extend their cultivation, and to grow the finer sorts of rice on a more extended scale, as the soil and climate of this tract appeared to bring these grains to great perfection; and, as the labor and expense of forming new Bhautt Churries, or rice fields, in the most desirable situations would be attended with a considerable outlay of money, advances of cash were made to the people for the purpose of their forming new fields, and repairing the old ones, which were in a very dilapidated state at the time, owing to the anarchy and confusion that had extended to this part of the country, when many of the Kolies had neglected their fields, and many families had been destroyed. The money advanced was to be repaid to Government in small instalments.

The Kolies are much in want of such encouragement at present, for some of their fields are neglected and others out of repair. The chief object ought to be to extend the number of their rice fields, which would ensure a more extensive cultivation of this grain. The interest of the Government, as well as that of the people, would be much benefited by such an arrangement.

Notwithstanding there is a much greater fall of rain in this tract than in the open country to the eastward, yet, owing to the rocky nature of the hills and the little depth of soil in the valleys, the supply of water during the dry season is often very inadequate to the

wants of the population.\* I have known several instances of the inhabitants of some villages having to go two and three miles for water in the hot weather, and what they procured was stagnant and filthy.

The following are the various sorts of grain cultivated by the Kolies.

Rice, Bhautt, Tandool. 1st that known by the name of Amby Mohur is a small grain, but a superior description of rice ; it is high flavored and pleasant to the taste, consequently much esteemed by Brahmuns and wealthy natives. The Kolies in general sell it to the Bunniahs at the rate of twenty seers (forty Bombay) per rupee.

It is retailed in the Poona market from twelve to fifteen seers per rupee, and from eight to ten seers the rupee at Ahmednuggur.

2d. Cheemun Sall is a much esteemed rice, being also a small and fine grain, but without flavor ; it sells at the same rate as the Amby Mohur.

3d. Jeery Sall, is also a fine grained rice, and highly prized by the Brahmuns and other rich natives : it sells at the same rate as the Amby Mohur.

4th. Krishen Sall, a coarser description and rather dark. It is called the black rice, and sells about twenty-two seers for the rupee.

5th. Kummode is a large grained rice ; it possesses a high flavor, and is much sought after, as it is in generally cheap ; sells about twenty-four seers for the rupee.

6th. Raie Bhogg is a common rice ; grain of a medium size ; has little flavor ; sells at the price of the Kummode.

7th. Sukwar rice ; this grain is of a medium size, has no flavor, but is rich and glutinous, and sells at twenty seers the rupee.

8th. Wurrungull is a large grain, coarse and tasteless ; sells about twenty seers the rupee.

9th. Takkia is a large coarse grain ; it is very insipid, and sells from twenty-eight to thirty-two seers the rupee. Some of the poorer Kolies make it into bread.

10th. Dhoull Rice resembles the Takkia rice very much in being coarse and tasteless, and sells at the same price.

These three latter sorts Wurrungull, Takkia, and Dhoull, are sown on the Mallzumeen (dry and rising ground), where it can be irrigated by some passing stream, otherwise they must depend on the monsoon rains. These coarse kinds of rice are sown early in June after the first fall of rain, and ripen in September, and consequently called hullwa, meaning early, while the fine kinds take longer time to attain maturity, and are called gurwah or slow. They

are also sown in June, pulled up in July or beginning of August ; the roots having been well washed, they are transplanted in the Bhaut Churries, and cut down in November.

The operation of transplanting the rice into the new fields is an important, but a tiresome and most fatiguing one. The new fields require to be well soaked with water and the earth softened, so that when the hand is placed on the surface, it produces an undulation like a bog. The men and women employed provide themselves with small stools to sit on this sheet of mud. It frequently rains all day, and they are teased in a distressing manner during the time by mosquitoes and gnats. A few weeks after this, when it becomes necessary to weed the rice, all those engaged in the labor keep a cowdung bratty (cake) burning near each of them, that the smoke may assist in driving away these tormenting flies. Both men and women use a description of covering made of leaves and split bamboos to fit the body, and termed yearlah, to protect them from the rain ; and while weeding, as it requires no small ingenuity to keep the piece of cowdung burning, owing to the rain and wind, they are frequently obliged to keep it inconveniently close to them.

The Kolies dispose of the different kinds of finer rice to the Bunyahs or grain merchants, retaining only a very small quantity for their own consumption on occasions of particular festivals.

Nagly, *Cynosurus Corocanus*, is sown broad cast, chiefly on the rough ground (Dullie) prepared for it with the hoe, on the tops and declivities of the hills. It ripens in the end of October and beginning of November. Nagly bread is one of the principal articles of food of the poorer Kolies.

Khoorachny, *Verbesina Sativa*, is sown on the hills and Mallzumeen in Jesth and Aswin. From this an oil is expressed, which is used for the lamps, and in their food. The Pend or oil-cake is very nourishing, and given to milch cows and hard working bullocks.

Toor, *Cytisus Cajan*. The Toor (Dhall) grown here is of the same kind as in the Konkun. It is sown in the same fields with Nagly in the Mallzumeen before the first fall of rain in June, and ripens in December and January.

Rahlay, *Panicum Italicum*. The Kolies sow a little of this small grain for their own consumption.

Bhadully, *Paspalum Scrobiculatum*. This is sown after the first fall of rain. They eat this prepared as bread, and boiled as rice.

Sawa, *Panicum Milieacum*. This grain is sown broad cast on spots of ground cleared for the purpose on the tops and sides of some

of the hills, also in the Mallzumeen. It is sown early in June, and ripens in August.

Rajgeera, *Amaranthus Polygamus*. The seed of this plant is sown in June, and it ripens in December. This grain is eaten on fast days, being prepared as flour ; it is mixed up with milk on such occasions.

Waal, *Dolichos Lablab*. The Kolies grow small quantities of this pulse, which they use as split peas.

Wheat, Gowho. The Kolies sow the Katiah wheat and Pottah wheat in the Bhautt Churries in the end of November and in December, and it ripens in January and February. They keep the wheat for festivals.

Dordiah, *Phaseolus Max*, prepared and used as Dhall or split peas in soup.

Hurburrah. Known also by the name of Chinnu, *Cicer Arietinum*. This grain is termed Bengal horse grain in some parts of India. The Kolies sow a small quantity of it in their Bhautt Churries in October and November ; it ripens in January and February.

Mussoor, *Ervum Lens*. A small quantity of this pulse is sown after the termination of the monsoon,

Wattanna, Peas. The Kolies grow a small quantity of peas in the cold season ; the pea is very small, and used as Dhall.

Kodroo, *Panicum Frumentaceum*. This small seed is cultivated on the hills and in the Mallzumeen ; it is prepared and eaten after the same fashion as rice.

Mukkah, Zea Maize or Indian Corn. A little of this grain is sown in June, and sometimes in December ; it ripens in three months.

Ambarry, *Hibiscus Cannabinus*, is sown at the beginning of the monsoon. Some of the poor people eat the seed when mixed with other flour ; the leaves are very bitter, but when mixed with red pepper and salt, are eaten with bread. The stalk is soaked in water, and the fibre used as hemp for making ropes, &c.

Tag, *Crotalaria Juncea*. This is sown in the beginning of the rains, and ripens in November and December. The fibre of the stalk is used for making ropes and a coarse material for bags used by the Bunjaries in carrying grain, salt, &c. Cattle are fed on the seed.

Sugarcane, (Mahratta,) Oos. They plant the canes entire and close together in the Bhautt Churries, or rice fields, which have been well manured and prepared for the purpose. This is in the month of October or November. The dew during the cold season keeps

the soil moist, and the cane shoots up six or eight inches before the Hooly (at the vernal equinox). The cane is cut down in the following December. Cane grown after this mode is said to produce sugar of a much better description than that which is irrigated.

Jowaree and Bajereee are not cultivated in these hills. The Kolies bordering on the plains alone grow some Bajereee.

They cultivate a few of the vegetables and legumes commonly grown in the open country. Their jungles supply them also with a great variety of vegetables, (about twenty or thirty sorts,) besides fruits, berries, &c. The principal jungle roots are the Anway, Kendur, Choie, Sardull, and Pundah and Turpull. The Anway grows in the hardest red soil among the rocks, and consequently it is a difficult and laborious task to dig it up. In appearance, and, in many respects, in quality, it resembles the yam. The root is found buried one to two feet in the ground; it sends forth a shoot like a creeper, which clings to any bush or tree near it. The substance of this plant is white, and they boil it in milk. Natives of rank prize it much. The plant of which arrowroot is made, grows abundantly in the hills, and near some of the villages; the Kolies call it Sillinda, but they do not use it for any purpose.

The Koudur resembles the plantain tree; the root is much eaten by the Thakoors and some Kolies during scarcity. They also eat the root of the Turpull, Pundah and Choie, when grain is dear. The Sardull is a large bulbous root, and is also eaten by the Kolies in times of scarcity; it has an extremely rough and unpleasant taste. They use it also to cure the guinea-worm.

### *Character and Habits.*

From what has been stated, it will be seen that the Mhadeo Kolies must be considered a strictly agricultural people, and in general they appear to be well acquainted with the usual system of husbandry of the country. Many of them are hard working and diligent in their farming pursuits, and are consequently placed in easy and comfortable circumstances, compared with a large portion of their tribe who live in the greatest distress and poverty. Although the Kolies are quick, and possess a good deal of shrewdness, they are not so steady and intelligent as the Koonby cultivators of the plain, being generally disposed to be more indolent, thoughtless, and improvident. No doubt, local circumstances, the influence of climate, and the nature of an oppressive Government tended much to establish unsettled and predatory habits among them. A few of the most

ignorant and destitute frequently quitted their homes, fled to a distant part of the country to evade paying their rents or adjusting their accounts with their creditors, while some of the most dissolute, who professed to lead a life of idleness, enjoying such comforts as a little money only could procure them, were in the habit of stealing to supply their wants, or joining a party of their kinsmen on plundering excursions, most commonly into the Konkun, for they always have been a most determined and desperate set of robbers. \* However, within these few years, they have been greatly restrained, indeed, nearly weaned from this wicked propensity of helping themselves to the property of others. Generally speaking, they are not so stout or robust in their persons as the inhabitants of the open country; besides, their clothes are of a coarser description and more scanty, but in other respects they scarcely differ from them in appearance. In former days many of them were men of a bold and high bearing; a spirit of great independence and freedom existed among them, chiefly inspired by their inhabiting a naturally strong and romantic country, where they could roam at pleasure and enjoy the liberty which their wilds conferred on them, seeking refuge in their fastnesses when they deemed it necessary to flee from the strong arm of power.

They may be considered a sober and temperate people, which however, may be owing principally to their poverty. They are excessively fond of tobacco, which they both chew and smoke, and without it they declare they could not exist.

The Kolies accuse each other of being faithless and cunning; they seldom communicate their intentions of a private nature to any friend; they also bear the character of being very revengeful, and gladly, but patiently, await an opportunity of secretly indulging their vindictive passions. But one of the most odious features in their character is the envious spirit said to be more or less common to them.

Notwithstanding the Kolies exhibit many vices in their disposition, to which the common ones of falsehood and deceit are to be added, yet, in their intercourse with each other as members of the same village community, they, in general, bear a pretty fair character for

\* They were in the habit of torturing persons they seized, in order to extort money from them. I recollect seeing the Patell of a village near Trimbuk, in 1819, who had been cruelly burnt by the members of a gang with the matches of their guns, as he refused giving them three hundred rupees. A man seized by the same gang and treated in a most shamefully cruel manner, died in consequence.

honesty and plain dealing, and shew a readiness to aid and accommodate each other on particular occasions.

In their conversation they are very fond of using proverbs and similes. There are only a very few of them indeed, who have received any education, or who can write or read. Some are gifted with retentive memories, and, although so illiterate, they appear to relate traditions connected with their own history with great precision. The animal perceptions of the Koly seem very acute, and their agility and speed are often very remarkable.

With the exception of the cow and the village hog, the Kolies eat of all kinds of animal food; they are very fond of the wild hog, which they occasionally contrive to kill by pursuing and forcing it to leap down a precipice. It is a most exciting spectacle to see the inhabitants of two or three Koly villages bounding with rapidity over the hills after the wild hog, shouting and cheering themselves and their dogs forward in pursuit of the game. The Kolies who are in the pay of Government, are armed with matchlocks, guns and swords. They never appear to use the bow and arrow, although the Bheels in their vicinity scarcely use any other arms.

The Koly females are generally slender and well formed, and their features of a pleasing expression. Some of them are very pretty, and when compared to the robust, and often coarse, women of the Koonby cultivators of the plain, a very considerable difference is perceptible. Where so much poverty reigns, we cannot expect the females to be particularly well dressed. The Koleens in general have a very limited wardrobe, the whole consisting of little more than two or three sarhies, (and these are often much worn,) and about an equal number of cholies; they tuck up the sarhy after the fashion of the women of the Konkun, so that it seldom comes down lower than the knee. They have few ornaments; a small golden nose-ring, and probably a small ring of the same metal in each ear, with two or three silver rings on their fingers. The wives of some Patells and of the Naiks, of course, dress a little better than the other women of the village.

As wives, (notwithstanding the Kolies have sometimes more than one,) there is every reason to suppose that they are as faithful and as much attached to their husbands, as those of any other tribe. That there are instances of infidelity among them, cannot be denied; and some occasionally do elope. However, in their small villages seldom or never are such instances of highly degrading and immoral conduct to be seen, as are so prevalent in the towns and villages in the Desh

or plain. Indeed, the Kolies, both men and women, appear to be shocked at the dissolute manners of the population of the open country. The Koly women have commonly very large families, but many of their children die in their infancy of small-pox, measles, and hooping cough. They are affectionate mothers, and, notwithstanding the very laborious life they lead, seem cheerful and happy. Their time is much occupied with their domestic affairs and out-door work. In fact, their drudgery seems unceasing. At, and often before, dawn, they grind the corn required for the day's consumption, then milk the cows and buffaloes, and assist in driving them out to graze; then sweep the house, and frequently plaster the floor; afterwards bring water home from the river, which is frequently at a very considerable distance. Cooking provisions for the family follows, besides attending to the children, or nursing one of them. However, it is during the rainy season that the heaviest share of labor devolves on the Koly females. When the fresh grass \* springs up, the cattle are very much affected by it; so much so that it becomes necessary for the women, sometimes assisted by the men, to clean out their apartments several times during the night; the cattle are driven outside while this operation is performed, and should it happen to have been raining at the time, the atmosphere of the house after their re-admission, becomes unpleasantly heated from their breath and the steam arising from their bodies. The Koly women have also to perform a most onerous portion of the field labor, as they have to assist their husbands in the harassing task of transplanting the rice into the Bhautt Churries, and, at a subsequent period, weeding the various grains growing in the other fields. They have likewise to contribute their aid at the reaping season.

It is the duty of one of the elderly females of the family to look after the dairy; as milk does not keep without souring above a few hours in this country, the people for their convenience boil it. The Kolies for this purpose place their fresh milk invariably on a very slow fire, and it is gradually heated for several hours, when it is suffered to boil for a few seconds, after which it is poured into flat earthen dishes, and some sour milk, of the preceding day, is added in order to thicken it, and on the following morning it is made into but

\* In the months of August and September, the grass on the hills becomes very rank; that known by the name of Ghohona is said to possess a peculiar heating quality, and the milk of cows and buffaloes that graze on it, produces a great degree of stupor, and on strangers it acts as a drastic cathartic.



ter. \* They only make ghee during the monsoon and two of the cold months. There are Bunniahs who travel about the country and buy it up weekly at a very low price.

As one of the days of the week is consecrated to each of the chief Hindu deities by their respective votaries, and kept as a fast by them, the Kolies dedicate one of their buffaloes or cows to their household gods, and all of them who wish to be considered punctual observers of their religious rites, abstain from using the milk of the consecrated cow on these fast days. It is converted into ghee, and burned in the evening in a lamp placed before the family idols. They sometimes burn some of this consecrated ghee near a precipice in the vicinity of water, to propitiate the tutelary spirits of the place, to prevent any accident befalling their cattle, when descending into the bed of a river to quench their thirst.

To ensure the milk being readily converted into good butter, the Kolies insert a small piece of the bhoot khet tree into the slit end of the churning staff used in making butter. This is supposed to possess the virtue of counteracting the influence of the evil eye (principally that of the females) and the machinations of the sorceress, and is therefore used for that purpose, when they fancy one of their cows has been enchanted.

The Kolies are fond of charms and amulets. Like other inhabitants of this country, they believe that the tail of the chameleon possesses many virtues, especially that of curing intermittent fever of the tertian type. When they wish to procure a chameleon for the sake of its tail, the animal must be caught on a Friday; it is kept all night in a pot with a little grain, and killed on Saturday morning; the tail is then divided into small pieces, and preserved in a copper case.

In common with other classes of Hindus, they are in the habit of drawing omens from the flight or passage of birds and animals. If a crow, a cat, or deer, cross the path of a Koly, in a direction from left to right, just as he is proceeding from his home on some important business, the circumstance is considered unlucky; and he will return in consequence, and delay his departure for a few hours, or probably a day or two. Sometime, however, it will be considered sufficient merely to turn round on the spot on which he was standing when the occurrence took place, and, changing his shoes from one

\* The butter and ghee made from the milk of the cattle that graze on the coarse grass of the hills, is considered of an inferior quality to that produced from the milk of cows in the open country.

foot to the other, he may resume the journey. It is considered equally unfavorable on such occasions, if a hare or a snake cross the path in either direction.

The Kolies seem to possess a little knowledge respecting the medicinal properties and uses of the plants, &c. of their jungles. They attribute much of their sickness (fever and ague chiefly) to their partaking largely of melons, gourds, Mukka, and vegetables that they grow during the monsoon.

In fever cases they use the Bhooie Khollah, which is the name of the root of a creeper known by the term Puttanah. It grows chiefly in well watered and shaded ravines. The root is large, white and bulbous. They cut it into thin slices and steep it all night in water; a little of this water is given to the patient to drink, and his arms and body are gently moistened with the liquid. They say it is only necessary to apply it a few times to cure a person attacked with fever. The leaves of the Puttanah are capital food for horses, rendering them sleek and fat in a very short time. The root of the Kasada plant is also used in fever. It is an annual, and grows near hedges and dunghills; its leaves are small and resemble those of the Tamarind tree; the flower is yellow and the seed is contained in a small pod; there are two kinds of the plant. The root when cleared of its bark is pounded, then mixed in a small quantity of water, and strained; a little of it is given in the morning, at noon, and in the evening to the patient; a profuse perspiration is brought on, which tends much to produce an early cure in very severe fever cases; it is given for several successive days if necessary.

In cases of dysentery and of diarrhœa they administer various remedies. The fresh root of the Bhooie Sakly is pounded, and the juice expressed and mixed with goat's milk, or with water; this is given for three successive days early in the morning, and on an empty stomach. They also mix a little lime (lemon) juice and sugar-candy, to which they add some poppy seed that has been soaked all night in water; an electuary is made of this, and the patient takes it for three successive mornings. The root of the Yell Toorrah is prepared and administered in the same manner. They take the root of the Ran (jungle) Bhendy (*Hibiscus esculentus*), which is pounded and mixed with dhyne, or thick sour milk.

They cure wounds of all descriptions by filling or placing upon them the pounded bark of the Dhouly Khurmatty tree. They also use the pounded leaves of the Oully tree for the same purpose.

To children they give a small quantity (a pice weight) of the juice

of the Oombre tree, which is obtained before sun-rise, by making an incision in the bark of the tree; this is mixed with an equal quantity of the mother's milk, and given for several days.

In cases of marasmus in children, the pod of a creeper called the *Morrah Sengh* ground down in milk or water, and the fruit of the *Kombullna*, a bush about the size of a small lime, are mixed together, and a small quantity given to the young patient for three or four days.

They use various roots as purgatives. For tooth-ache they apply a small pill, the size of a pea, made of the leaves of the *Ran* (jungle) *Moggury*; they lay this on the diseased teeth; if it touches the tongue or gums, it raises a blister. They are much annoyed with rheumatic pains in December and January. To cure this, they apply the actual cautery and burning turmeric.

Beggars are seldom seen in the small villages in the hills. It might therefore be supposed that the inhabitants were not often called upon to exercise the duties of charity. However, it is known that there are many indigent, blind and sickly persons, who are supported entirely by the bounty of their relatives, who are actuated solely in doing so by the praise-worthy motives of strong natural affection. Very possibly, a spirit of pride might induce a few persons to bestow a little in charity on their poor connections, rather than hear of their subsisting by mendicity among strangers. To persons passing through their villages they are generally hospitable, and they will permit them to occupy the small temple of the tutelary deity of the place, or some family will grant them leave to sleep in the shed adjoining their dwellings in which their household gods are kept.

The *Kolies* build their houses by erecting a number of posts and filling up the intermediate spaces with wattle work, plastered over with mud, this being a substitute for a more substantial wall. The roof is thatched with grass. These dwellings in general are roomy and spacious, and commonly divided into several apartments. That in which the family usually assemble is the largest; the grain stores, &c. are kept in another, which sometimes forms one of the sleeping apartments, and where the females retire. Some of the cattle, especially the cows, are frequently kept in the dwelling house. The furniture in a *Koly's* house consists of two or three coarsely manufactured couches used as beds, a few copper and brass pots used for cooking and boiling water, some small and large earthen pots for containing water, ghee, oil, spices, and a little grain; they keep their store of grain in large wicker baskets plastered with cow-dung.

The *Kolies* pay their adorations to all the Hindu gods, but the

chief object of their worship is Khundyrow, commonly called Khundoba. This is an avatar of Mhadeo, assumed by him when he destroyed the giant Munny Muñ, and one of the most popular of the Dukhun gods. The chief temple dedicated to this deity in this part of the country is at Jejoory. There is another of great repute at Bheema Shunkur, the source of the Bheema river. \* As this is in the tract inhabited by the Kolies, numbers of them attend there during the different festivals, especially on the Sheoratty, or night dedicated to Sheo, in the month of February. Bhyroo and Bhowany are also much worshipped by the Kolies. These three, and the derivative deity Heerobba, constitute the Koly's household gods. They present offerings at the tombs of any Mahomedan saints like other superstitious Hindus, and at times they pay divine honors to persons whose existence may have been terminated in a violent manner, particularly if they or their ancestors were accessory to the event, in the hope of propitiating their favor, and that the past may be forgotten.

Their principal holidays are the Hooly, Dussera, &c. The Hooly festival is supposed to be in commemoration of the vernal equinox. The Kolies enjoy themselves greatly during this merrymaking time. In many respects it may be compared to the Roman Saturnalia.

The Kolies commonly swear by Mhadeo, but the oath which they consider most binding is that taken on the bank of a river or near a well, when one of the party takes up a little water in the palms of his hands in some Bhundar, a few leaves of the Toolsy and of the Bell, with which a few grains of Jowary, are mixed. Each of them pours this into the other's hand, at the same time imprecating evil upon themselves, if they act contrary to their declaration.

The Kolies generally celebrate the nuptial ceremonies of their children when they are between the age of six and ten years. The ceremonies attended to by them correspond exactly with those performed by the Koonby cultivators, who are Shoodurs. The expense incurred at a marriage by the poorer Kolies varies from fifty and twenty to twenty-five and thirty rupees; those in better circumstances expend from forty to sixty rupees, while a few of the Patells and Naiks will disburse a hundred rupees and upwards. Many of them too often involve themselves inextricably in debt in getting their children married.

It is a common practice among the Kolies for their widows to enter into the matrimonial state a second time, conforming to the Pot, or Mhotur ceremony.

When a woman abandons her husband, and takes refuge with a

man of a different caste, the husband performs the Kreea Kurm, or breaks the murkhy (pot), that is, he performs all the funeral rites, as if she had died a natural death, after which he is at liberty to marry again. But if the woman leaves her husband to live with another Koly, the Kreea Kurm is not then performed. A woman eloping with her paramour seldom marries him according to the Mhqtur ceremony, until after her first husband's death. When a Koly dies who has been very much attached to his wife, and if after some time she gets married again, should she or her husband be attacked by severe fever or other sickness, or any unpleasant occurrence befall her husband, a Bhuggut is immediately consulted to ascertain what is best to be done to restore health and peace to the family. The Bhuggut will most probably declare that the woman's first husband has caused the affliction, but that if suitable peace offerings be made by way of atonement, the distress and vexation complained of will be removed. She will consequently entertain some of her friends, and bestow some trifle in charity, besides having a small silver image (of the value of a rupee) made up, which ought to be a likeness of her first husband; this is cased in copper, and it is necessary she should wear it suspended from her neck, or place it with the household gods.

When a man dies who has not been married, which among the Kolies seldom happens, they say an attwor [unmarried] has died; and unless offerings are made to his manes previous to a marriage being celebrated in the family, it is believed some great calamity will befall the bridegroom or bride. For instance, that they will be greatly tormented with sickness, have no offspring, or, in the event of their having children, that they will not be long-lived. Therefore to ensure happiness to the parties, a sheep or fowl is sacrificed as a peace-offering, and a few friends invited to partake of the feast. Should years have elapsed, and the family have removed to a village distant from that where the attwor was buried, the party will go out into an adjoining field to perform the ceremony before any stone, (a substitute for the grave of the deceased,) upon which some Bhundar &c. have been rubbed, and some Jowary and a Soopary nut have been placed. These articles and a burning lamp are previously put into a flat brass dish, and carried to the spot by a female, over whose head four men hold a stretched sheet for a canopy. A boy holding a naked sword in his hand, and sitting upon a man's shoulders, follows the female, and he is made to shout and scream during the time the procession is moving.

The Kolies bury their dead, and observe the same funeral ceremonies as the members of the Shoodur tribe. The bodies of persons who die of a lingering disease, also those who die suddenly, are burnt, as it is conceived their death has been caused by conjuration and witchcraft. They examine the ashes either the same evening or on the following morning, in expectation of discovering some proof of the cause of the death, for they verily believe that if the deceased had stolen, or unjustly retained, any article of food or wearing apparel, &c. (and the owner of such an article consequently practised some necromantic pranks in order that the thief might be visited by some affliction) that a small portion of the said article enveloped in a part of the intestines, will remain unconsumed by the fire, and will be seen smoking when the rest of the body has been reduced to dust. If the friends of the deceased were satisfied that it was by the magical powers of the owner of the article, their friend had met his death, they would seize the supposed murderer, and report the particulars of the affair to the Government agents. If the man or woman thus apprehended could bribe the influential persons in the district, the affair might be terminated here; otherwise the magician would be kept in confinement in one of the hill forts for some time.

Many of the Kolies experience a considerable degree of uneasiness and alarm in consequence of their fears, that they may at one time or other incur the displeasure of some of the magicians\* or witches in their neighbourhood, especially the Thakoors and their females, who have the credit of being very great adepts in the necromantic art. In such a state of society we need not be surprised at hearing of such things, for history informs us that the Egyptians, Jews, Greeks, and Romans, also people of more modern times, believed in the reality of demoniacal possessions. That they supposed spiritual beings did occasionally enter into the sons and daughters of men, and distinguished themselves in that situation by capricious pranks and acts of wanton mischief. In fact, that they afflicted men

\* There is a Koly family, consisting at present of several brothers living in a village a couple of koss from Kotool, who are considered great bhootallies or conjurers. They have the credit of having committed the most atrocious acts; any of their neighbours who molest or annoy them, they distress at a most unmerciful rate. They destroy and lay waste the corn, the sugar-cane, and produce of the fields of persons they dislike. Those that have attempted to make a stand against their evil practices have been forced to quit\* their homes, although they have expended money (in vain) in bribing persons of influence in the hope of overthrowing the bhootallies. It is said that the members of the family for a series of generations have possessed this power.

and cattle with diseases. All nations and tribes immersed in ignorance and superstition have much the same notions on this subject, but the faith of few people is more staunch in the belief of such things than that of the Kolies.\* Whatever malady or disease may seize man, woman, or child, or even their cattle, the Kolies imagine it is produced by the agency of some evil spirit or offended deity, and after sometime, having in vain attempted to cure the disease by the application of such remedies as they may be acquainted with, they will consult some Deolushy, or exorcist, or caster out of evil spirits, regarding the matter. The chief persons in the family, or any male or female of it, will go to the residence of a Deolushy,† (there is not one in every village,) to beg that he will give his advice and assistance, in removing the infliction with which they have been visited. The Deolushy makes minute inquiries, or affects to do so, respecting the nature of the sickness, and, when he has had all the necessary information communicated to him, he will tell the person applying for his aid to go home, and to return to him on the following day, that he will in the mean time consult his god, and when he comes back, he will inform him what steps it will be necessary to take to procure the wished for cure. When the person returns in the course of the following day, the Deolushy will tell him that his family have neglected for a length of time paying their adorations to his deity Heerobba, and vows made have never been fulfilled, or probably the Deolushy will remark that Bhowany or Khundoba is offended with the family, and that they must pacify the offended deity by suitable peace-offerings. Should the Deolushy inform the person that Heerobba is offended, and that sacrifices and offerings must be made to appease that deity, he will be asked as to the time required to remove the disease. The Deolushy may allow fifteen days, but at the same time he prescribes for the sick person, and recommends him to follow a particular regimē, &c. He then goes to the censer in front of the shrine of his deity, and takes up some of the consecrated frankincense ashes, and gives a portion of it to the man, to be rubbed on the forehead of the invalid, and he blows the rest into the air from between his fingers. Vows are now made that the nec-

\* All the Hindus and Mahomedans appear to dread the influence of incantations, and implicitly believe in the mischievous effects of the evil eye, the existence of ghosts, and the power of witchcraft.

† Various castes follow this profession, goldsmiths, carpenters, smiths, Kolies, Thakoors, and even Dheres; but among all of them, the Thakoors are most noted.

essary sacrifices shall be made if the sick person recover within the time mentioned by the Deolushy. In this case it is announced that the ceremony will be performed during a particular month (after the termination of the rains;) other wise should the Deolushy's prophesy not prove correct, no further notice will probably be taken of it. When the time arrives, three or four sheep are purchased for the occasion, if the family of the invalid can afford to expend so much money; then, on a Monday evening, at sun-set, two or three sheep are sacrificed as a peace offering to the goddess Bhowany (Dewec) and the gods Khundoba and Bhyroo, and the Gondhul ceremony takes place afterwards. A number of the neighbours come to partake of this great and noisy feast; and on Tuesday morning, when the sun has risen, the Deolushy gives the signal for the sheep set aside for the offering to Heerobba to be sacrificed. A number of the villagers assemble not only to partake of the feast, but to observe the Deolushy performing the ceremonies customary on such occasions. All the women and children are either directed to quit the house during the time, or they are sent to such part of the dwelling as may be to the westward and out of the way, so that their shadow \* cannot fall on the place to be occupied by the Deolushy. Near the spot where the household gods are placed, a fire is kindled and a pot placed on it, into which oil is poured. When the Deolushy enters the house he sits down near the household gods; some of the family are busy preparing some dainty cakes and choice bits of the mutton, which are deposited on the ground near the fire, while others are cooking the rest of the meat. A band of musicians seat themselves close to the Deolushy, who now commences his operations. He is anxious to exhibit himself as inspired, and to satisfy them that he has succeeded in getting the deity Heerobba to enter into his person. He therefore begins to writhe his body, throwing his arms backwards and forwards, screaming and groaning and shaking himself violently, in fact it might be supposed he was seized with strong convulsions; his hair is loosened and hanging over his face and shoulders, so that he has the wild and drowsy appearance of a person overcome and exhausted from the effects of some powerful narcotic. The drummers continue making a dinning noise all this time; and as the deity is now considered to have taken complete possession of his

\* One of the superstitious ideas of the Natives is, that even the shadow of a female, unless when a child or until she has become an elderly woman, pollutes their gods.



body, and the oil is boiling hot also, the audience preserve a dead silence. The master of the house then informs the Deolushy, that the pot is ready, upon which he gets up and calls out to the people to stand clear, as he is anxious that the proceedings should not be interrupted in any manner, more especially polluted by any impure shadow. He then takes a handful of Bhundar (consecrated turmeric powder) in his right hand, and in the left he holds a bunch of peacock's feathers, in the end of which the image of Heerobba is inserted; after having once or twice passed round the fire place, he sits down, then runs his hand along the edge of the pot two or three times, after which he raises it a little and gradually lets the Bhundar fall into the oil. He now places the flat of his hand on the boiling oil, and on withdrawing it, jerks the oil off his hand into the fire, by which the flame is greatly increased. A portion of the cakes and meat, which had previously been deposited near the fire place, is now taken up by the Deolushy and cast into the pot, and when he conceives it is sufficiently cooked he searches about with his hand in the boiling oil till he has found all he put in, after which the remaining cakes and meat are cooked in the same way. The guests then partake of the feast, which is served out after the Deolushy has presented each person with a small quantity of that which he cooked, and which is considered consecrated. When the feast is finished, the master of the house requests the Deolushy to say if every thing has been properly conducted. The Deolushy will answer, that as the sickness has disappeared, and the peace-offering has been suitably tendered and accepted, they ought to show their gratitude to the deity, and be most particular in making him a similar offering every third year.

It is to be remarked, that if the Deolushy finds the oil insufferably hot at the time he puts his hand into the pot, he calls out in a stentorian voice that their proceedings have been polluted, and that they must recommence the operation; he will at the same time show symptoms of disappointment and of great displeasure.

The Deolushies are considered to possess the power of detecting the evil practices of witches and conjurers, but, as they are not equally talented or equally cunning in their art, their answers are not always received with implicit faith; therefore if the conduct of a person is to be searched into, several Deolushies are questioned on the subject, and if their answers corroborate each other, it is concluded that the conduct of the suspected person is such as to justify them shunning his society. They are also consulted about absent friends and thieves,

and the recovery of stolen property. A thief will sometimes throw himself on the mercy of the Deolushy, and offer to bribe him to silence, and to restore the property, for which the owner also tenders a present. When a Koly has lost one of his cows, he sometimes goes to ask a Deolushy where he is to find the animal, which may have been missing for two or three days, and the owner uncertain whether she has been stolen, or killed by a tiger, or drowned in a river, or has fallen over a precipice. The Deolushy, after consulting his deity, will tell the owner, that by going in an easterly or westerly, or in some other direction, he will find the animal.

The Mhadeo Kolies have a tribunal termed Goturany, composed of six persons, the establishment of which seems to be co-eval with the original institution of the caste. The functions of the members of the Goturany are serious and important, being to regulate and watch over the moral conduct of all the members of their community, to check the spread of licentiousness, to prevent the infringement of the rules of their caste, &c.

I shall proceed to state the designation of the several persons composing this court, and the manner in which they conduct their proceedings.

- |                                 |                  |
|---------------------------------|------------------|
| 1st The Ruggutwan or President. | 4th The Dhallia. |
| 2d The Mettull, or Deputy.      | 5th The Murkiah. |
| 3d The Sablah or Constable.     | 6th The Hurkiah. |

The members of this court, the situation of each being hereditary, acted under the authority of the Chief Koly Naik of the caste, who formerly resided at Joonerc. The Ruggutwan resides at Rajapoor, two miles from Joonere; he belongs to the Shesha Kool, one of the grand divisions of the tribe, and besides the above situation, held that of Patell of his village. No transgressor of the rules of his caste can be considered absolved from his sins, or re-admitted into the tribe, until he has partaken of food from the same dish with the Ruggutwan. It was the duty of this functionary to issue instructions for the apprehension and trial of persons accused of transgressing the rules or customs of the caste, but previous to the trial, and before issuing orders for assembling the punchait, it was his duty to communicate to the Chief Naik the particulars of the charge.

The function of the Mettull is to assist the Ruggutwan, and to act for him in his absence, being his Deputy. He is a member of the Keddar division of Kolies.

The Sablah belongs to the Khcersagur division, and may be con-

sidered the constable of the Goturany. It is his duty to travel from place to place, to inquire into the conduct and habits of the people, particularly of such as were suspected of leading licentious lives, to seize accused persons and hand them over to the Ruggutwan. The Sablah, when on a tour of duty, is entitled to receive from the village in which the offender resides a small sum of money and a fowl.

The Dhakia, a member of the Shesha Kool, is so designated from the term signifying a branch, which is thus explained. When measures are taken to excommunicate an offender, who has either refused, in the first instance, to obey the summons of the Ruggutwan, or who, after the decision of the punchait, has remonstrated against, or will not submit to, the sentence of that court, the Dhallia is directed to proceed to the village where the offender resides. On his arrival there, he informs the inhabitants of the intention of the punchait to denounce the accused unless he relent, and, warning them to hold no communication with him, the Dhallia then takes the bough of the Oombre, or Jambool tree, and places the branch over the offender's door.

The Hurkiah belongs to the Shesha Kool. His duty is to fasten the bone of a dead cow (Hurky) over the door of the offender's house. This proceeding constitutes the formal act of expulsion from the caste, and persons who after this dare to hold any intercourse with him, are considered contaminated, and no better than the most infamous and lowest out-caste of the Hindu community. As no more terrible calamity can befall a Hindu than to be thus excommunicated, he will throw himself on the mercy of the punchait, either to avoid the evil, or to remove it, if he should be already denounced.

The Murkiah belongs also to the Shesha Kool. His duty is to superintend the ceremony of purification when a man's house has been polluted by any transgressions, on the part of the family, against the rules of the caste. He is entitled to take away the murkies or earthen pots which he finds piled up in one corner, containing each small quantities of fine rice, spices, &c. These he replaces by new murkies, which he purchases with a portion of his share of the fine paid by the offender.

An offender may compromise the matter by payment of a fine, and in case any person is accused on insufficient grounds, and the accuser is unable to substantiate the charge, the latter is fined by the punchait, and obliged to provide an entertainment to the caste. The Chief Naik, the Ruggutwan, and members of the Goturany, and the

Patells who may have attended the punchait, receive each a share of such fines.

Should the fine imposed on an offender amount to a large sum, a portion of this used to be applied to repairing the village temples or choultry, and a few rupees were presented to any Sadhoo, or holy person, residing in the place. Ten or fifteen days were allowed for the payment of a fine, after the date of the punchait pronouncing the sentence.

When a boy or girl, the offspring of an illicit connexion, was to be admitted into the caste, the Goturany and a portion of the inhabitants of the village were provided with a feast, the cost of which averaged from thirty to sixty rupees. The amount expended on such feasts was, however, generally regulated by the means which the father possessed; when these were ample, a large sum would be expended, whereas when the father happened to be in poor circumstances, he would raise the sum required by appealing to the charity of his friends and relations.

It was usual for the Ruggutwan to bestow one of his own children in marriage on the child newly adopted into the caste, and if all his own children were already engaged, he was bound to obtain one among his kinsmen for this purpose. Failing this, he had recourse to the Mettull and the rest of the Goturany, who were bound to provide the young convert with a wife from their own families.

When an adult female was to be admitted into the Koly caste, a feast on a more extensive scale was provided, to which the inhabitants of the surrounding villages were invited. When the people were assembled, the Ruggutwan usually put to the candidate a few questions respecting her caste and family, and whether she was willing to abandon her own tribe to join them. After the men had finished their repast, a small quantity of the food was left by the Ruggutwan on his dish, three or four of the Patells present adding to the same. The dish was then taken to the new convert, who had to partake of its contents in presence of ten or fifteen Koly women, who were placed near her to witness the fact.

The Ruggutwan used to receive from the villages within the jurisdiction of the Goturany, contributions of grain, cash, ghee and fowls, the amount of which varied according to the size of the place. This he shared with the other members of the court.

The Ruggutwan used to attend the Jutra, or fair, at Bheema Sunkra, every third year, on which occasions he had to shave his hair and mustachoes preparatory to giving an entertainment to all the

Mhadeo Kolies who attended the Jutra. The feast occupied two or three days, and the expense was defrayed from the allowance received by him from the different villages under his jurisdiction.

It is necessary to state that, within these forty years, the authority and influence of the members of the Goturany have greatly diminished, and comparatively little respect is paid to them at present. Various causes are assigned for this change, but it is chiefly ascribed to the very great indifference with which the ex-Paishwa Bajeerow governed the country, for the Desmooks, the Brahmans, the Koolkurnies and Koly Naiks, were permitted to do as they pleased in the hilly district, provided they bribed the courtiers at Poona. The disputes which arose between Bajeerow and his adopted brother, the late Amrootrow, withdrew for a time the attention of Government from the management of the hilly districts; the Koly Naiks and the Zumeendars consequently began to usurp gradually the duties and emoluments appertaining to the office of the Goturany. These officers now frequently adjust matters connected with the infringement of the rules of their caste, accepting a trifling remuneration for the same, the sum being much smaller than the Goturany would have imposed.

In giving an account of the present state of the Kolies and tribes residing in the hilly country on the eastern side and along the range of mountains termed the Syhadry Ghauts, it is impossible to overlook the distress and misery suffered by almost every family in that part of the country, by the exorbitant rate of interest charged for money, and the unjust and unfeeling proceedings of the Bunniahs, who are the merchants and money lenders in those districts. I am disposed to think that this misery was originally produced by the excessive exactions made by the rapacious agents of a despotic Government on the poor Koly farmers, which compelled them to have recourse to the money lenders to satisfy, in the first place, the demands of the State. I am satisfied, however, that I can show that the bitter complaints now made by the Kolies against the odious usurious system of the Bunniahs, are well grounded. In giving a detail of the transactions which take place between the Bunniahs and Kolies, I shall confine my observations to the Rajoor district, with the inhabitants of which I am better acquainted; the same system, however, prevails along the whole of the hilly country which forms the subject of this paper, as well as in many other places in the Dukhun.

The Bunniahs settled in Rajoor are from Goozerat; there are four distinct families, who keep up a constant communication with their

relatives and friends in their native country; and when they have realized a competency they return home. The four Rajoor shopkeepers, by means of agents, have each established their shops in various places, to supply the forty villages of this Dang, \* and to purchase up from the cultivators whatever grain they may have for sale. It is well known that some of the Zumeerfidars have shares in one or two of these shops, and the circumstance of any person of rank countenancing, or in any way lending their influence to the Bunniahs, goes far to overawe and silence the poor Kolies, and make them stifle their groans, dreading that they may have cause to repent if they venture to make any complaints against the Bunniahs. Owing to the oppression to which they are subjected, and which they feel severely, the Kolies are naturally eager to engage in any undertaking that affords the prospect of being revenged on their enemies. These Bunniahs exercise their influence to prevent the Kolies selling their grain to any person coming from a distance to collect and purchase it; and if a Koly take his grain to any other district bazar, to sell it there to more advantage, the Bunniah will, in consequence, refuse to comply with any request from such a person for the loan of money. These monopolists have even expressed their displeasure on occasions when some Kolies have accommodated a few of their friends at Rajoor with a small supply of grain, at a price a trifle below the bazar rate.

It is to be recollected that the Bunniahs supply the inhabitants with whatever cloths, spices, salt, tobacco, &c. they may require, besides money and seed grain; they often also keep their accounts. This places the people unavoidably at their mercy, for there is no free market or competition by which these articles would be reduced to their true value; and, from the undue influence possessed by the Bunniahs, they manage to establish a difference between the buying and selling measure—a difference which varies from two to four seers in the value of one rupee's worth of grain.

The Bunniahs charge a premium of ten or fifteen per cent. on every sum advanced by them, and the interest may be paid in Koorachny seed at the rate of one paillee (four seers) of this seed monthly, for each rupee of the debt. The Bunniah likewise so manages that, by advancing the money in Bellapoory rupees, which are from eight to eleven per cent. inferior to the Poona Ankooshy rupee, in which latter currency the receipt is granted, the poor Koly sustains

\* Dang, a quarter or district, but occasionally applied to a wild hilly and jungly tract of country.

a heavy loss. The money lender always stipulates for the repayment of the loan in a short period, probably four months; and at the expiry of this period, should the price of the grain or other produce in which the debt is to be paid rise in the market, the Koly is sent for to settle his account; otherwise he is not reminded of the debt till the state of the market gives the Bunniah the advantage.

If a man who has got himself entangled in debts which he is unable to liquidate, possesses considerable energy, is spirited, or litigious, he will attend the Court when the Bunniah lodges a complaint for the purpose of recovering his money, in hopes of obtaining some redress; but in this he often fails, and his appeal terminates in his being obliged to sell his property to satisfy the rapacious Bunniah. In fact, the Bunniahs, before they resolve to prosecute a man in our Courts, adopt every precaution to ensure his being completely ensnared by bonds, receipts, &c. ere they bring a complaint against him, and a victim thus sacrificed and lodged in jail answers the views of the creditor, by making a forcible impression on his other Koly debtors. But many of these men surrender their cattle and property at once to the Bunniah, rather than submit to the vexation, inconvenience, and expense of being dragged from their families and homes to attend the Court at a distance, which may decree their imprisonment; others of the Kolies flee from their homes to escape the tormenting calls of their creditors. Those who abscond not unfrequently change their names, and too often subsist by robbery and theft; several of those who joined the formidable gangs that assembled in the Rajoor hills in 1828-29 and 30 were men who had become desperate from being inextricably plunged in debt. They informed me, after they were captured, that they had joined the gang in the hope of being able to secure some money or ornaments by plunder, to enable them to pay off their debts, and reside in peace in their own village.

I may add that such of the Kolies as were of a turbulent disposition and unsettled habits, not unfrequently endeavoured to realize by robbery, money sufficient to pay their arrears of revenue and to settle with the Bunniahs; at other times they indemnified themselves for the losses sustained in their transactions with the latter, by attacking the house during the night, and destroying his books of accounts and any papers they could lay hands on. They would, if greatly exasperated, take the Bunniah and one or two inmates of the house to a thicket, and, pressing a naked sword to their throats, make a demand of fifty or a hundred rupees, and if any reluctance

was shewn they would wound slightly the Bunniah's ear, and thus induce him to make offer of all the ready money in his house.

On such occasions the Kblies cover their faces to prevent detection ; but admitting that one of them was recognised, it was seldom that the Bunniah dared to charge him with the assault, but some of the ill paid and corrupt police agents would endeavour to gain the necessary information, and avail themselves of the circumstance to obtain a portion of the plunder. To guard against fire and other contingencies, the Bunniahs now keep several copies of their accounts with the Kolies ; one of these is lodged with their partner at Rajoor. The only stone-built and tiled house in a Koly village, is that belonging to the Bunniahs.

Complicated as is the mode of charging and calculating the rate of interest practised by the Bunniah, the method of keeping the Koly's account is still more intricate, and would require a person of considerable talent and experience as an accountant to comprehend them. The ignorant and unlettered Koly must, therefore, labor under every disadvantage. But, although many of these people are very simple and ignorant, they are not by any means indifferent to the difficulties into which they are likely to be plunged in consequence of their dealings with the Bunniahs ; and when anxious to come to some settlement with his creditor he endeavours to procure the assistance of the Patell, or some intelligent friend, to examine his account by hearing all the items read over, and the calculations of interest explained. The Bunniahs, however, are always averse to such proposals, and endeavour to avoid the presence of persons more skilled than the poor man when the accounts are examined.

### *History of the Kolies.*

We cannot expect to glean much authentic information of an historical description from an ignorant and unlettered people like the Kolies ; the few traditions they possess relative to their first settlement in their present locations and to subsequent events, until within the last century, appear to be involved in much obscurity and confusion. There is reason to believe, however, that they have occupied their present habitations for many ages ; for we find that Ferish-ta, the Mahomedan historian of the Dukhun, mentions that Ahmed Nizam Shaw, the first king of Ahmednuggur, employed a body of Kolies in his army, and when Ahmed's grandson, Hoosain Nizam Shaw, retreated into the hills near Joonere in 1562, at the period his



capital was attacked by the confederated Mehomedans and Hindoos, was joined there by Sabajee, one of the Koly Naiks.

There is a popular tradition in this part of the country, that the Gursees were the original inhabitants of the Dukhun, and that they were displaced from the hilly tract of the country by the race of Goullies or cowherds. These Goullies, it is said, subsequently rebelled against their lawful prince, who detached an army which continued unceasing in their exertions until they nearly exterminated the race of Goullies; and it is concluded that the very few who escaped the sanguinary measures carried on against them, were adopted ultimately by the Kolies into their tribe, and founded the Kool that bears their name. Be this as it may, there is no family in existence of the original name, but there are two (not very numerous) clans who are the descendants of the Gouilly Kool, namely the Damsahs and Waghmorials. The Poriah family of the Kuddum Kool, and the Potkoollah clan of the Aghassy Kool, are considered to be the descendants of the Gursees.

With regard to the overthrow of the Goullies and Gursees, the Koly traditions say that these people having been in open rebellion and plundering the country, an army from the northward advanced through Candeish by the Kassarbary Ghaut to subdue them, but that the rebels having assembled near Kassarbary, they attacked and put to flight the royal army. The king of the country greatly incensed at the discomfiture of his army, held out prospects of high reward to the person who would head an army which would inflict condign punishment upon the rebels. The country being wild and unhealthy, none of the officers in the pay of Government would offer their services for this duty, but a man named Sonejy Gopall, said to have been an inhabitant of the Mahratta territory, volunteered his services. An army was then employed under Sonejy, who appears to have been joined and ably supported by an active and intelligent Koly named Wunsojee Kokatta, whose name and exploits are quite familiar to the Kolies of the present day. The Goullies, who had resided in the hilly tract of country, were attacked and completely exterminated; and Sonejy Gopall was rewarded by being appointed Desmook of fourteen hundred villages, and the Koly Kokatta was presented with the Mokassa dues of the same number of villages; but as the country previously occupied by the Goullies along the Ghauts was completely depopulated, for the purpose of restoring it to prosperity, a number of Kolies from the Ballaghaut and the Mhadeo hills were assembled and taken to the deserted dwellings of the Goullies, and invited to occupy them and cultivate their fields.

It is a common practice with such of the inhabitants of the plains as bury their dead, as well as the hill tribes, to erect Thurgahs (tombs commonly of a single stone) near the graves of their parents. In the vicinity of some of the Koly villages, and near the site of deserted ones, several of these thurgahs are occasionally to be seen, especially near the source of the Bhaum river; the people say they belonged to Gursees and Goullies of former times. The stones, with many figures in relief roughly carved upon them, and one of these holding a drum in his hand and in the act of beating time on it, are considered to have belonged to the Gursees, who are musicians by profession; the other thurgahs with a saloonka (one of the emblems of Mhadeo), and a band of women forming a circle round it, with large pots on their heads, are said to be Gouilly monuments. This might be reckoned partly confirmatory of the tradition.

This account of the Kolies having come from the Ballaghaut and Mhadeo hills, is certainly quite the reverse of what might have been expected. It was natural to suppose that they had migrated from the northward, as the tract of country occupied by them is bounded both on the western and northern sides by districts in which the Koly population is numerous, and it is quite evident that those Kolies have advanced from the northward. It is to be remarked, that the Mhadeo Koly holds little or no intercourse with the other tribes in the adjoining districts. They are considered a more pure and respectable class of people. The Koonbies in the Joonere districts drink water from the hands of a Koly, and will also eat food prepared by them. The few Koonbies in the Kotool and Rajoor districts will do the same, but I believe they have some scruples on this score. However the Koonbies in Maldesh will not partake of water or food from the Mhadeo Kolies in that part of the country; this is said to be in consequence of the vicinity of the other tribes of impure Kolies in the Nassik and Wundiodory districts, and in the Attaveesy. If a Koonby has been working for a Koly in Maldesh he will receive rice or flour from the Koly, and prepare his own victuals. Tradition says, that Bhoregur, Phoolgown, &c. in the Ghorenahir, were the first villages established by the Mhadeo Kolies, and the inference we are to draw from this is, that they gradually advanced northward, to which is to be added the tradition of their having attacked and exterminated the Sombatta and Gursee inhabitants of Maldesh. Another circumstance that would tend to corroborate the tradition of the Kolies having come from the eastward is, that in former times all ceremonies connected with their marriages and births

and funeral obsequies, were conducted by the Rawoul Goossynes of the Linggaïet persuasion. We know that the people of the Ballaghaut are staunch worshippers of the Ling of Mhadeo, and these priests may have accompanied the Kolies in their journey to occupy the valleys of the western Ghats. When the Peshwa attained supremacy in the Government at Poona, some Brahmuns intruded themselves among the Koly habitations; these have completely usurped the duties and emoluments of the Rawouls for these seventy or eighty years past. The descendants of some of the Rawouls are settled at Chaus and Munchur.

During the wars carried on in the Dukhun while the Bhamuny dynasty of kings reigned, also by the Nizam Shawhy kings of Ahmednuggur, and subsequently by the Emperors of Delhi in re-establishing their authority over the Dukhun, the Kolies being a poor people, and occupying a strong country, very possibly did not suffer so much from an invading force, or from the governors of provinces, as the inhabitants of the open country.

It is said that, with the view of preserving order among the Koly inhabitants, one of the kings of Beder established a local police in each of the fifty-two valleys. A Naik and a certain number of Kolies were nominated for this duty, and the Bawun (fifty-two) Choury at Joonere was fixed on as the head quarters of the police establishment; the Naiks were styled Sirdars, and several of them had the title of Munsubdar conferred upon them. A Mahomedan \* styled Munsubdar was placed in charge of the police, as a General Superintendent or Sir Naik (Chief Naik). However, some time after this, the Kolies, from some unknown cause, became very discontented, and they assembled to the number of many thousands for the purpose of demanding redress of their grievances from the king, who was passing in the vicinity of Ekdurrah near the Puttah fort, south and close to the Balleshwur hills. But, as there was no person of acknowledged ability or experience among the Naiks whom they could implicitly intrust and depute to the court as their agent to get their affairs satisfactorily adjusted, all seemed to agree that none of them could fulfil the duty so effectually as a poor Koly laborer surnamed Pauperah, who was in the employ of the Awary Patell of Khirlay, and who was noted for his intelligence and sagacity. He was consequently requested to act as their chief and representative on the occasion, on which account he was presented with new clothes and

\* There has been no Mahomedan Sir Naik for these 120 years. Mahomed Lettief was the last.

such few necessities as his new situation demanded, and all the Kolies engaged to obey him. The negotiations did not terminate favorably for the Kolies, for the Prince gave orders shortly afterwards to attack them, to convince them of his being dissatisfied with their proceedings. However, Pauperah, by his great activity and vigilance, continued for a series of years to defy the king's troops, and prevented them gaining any advantage over the Kolies and so completely disgusted the officers of the royal army by misleading and counteracting all their attempts and plans to punish the rebels, that the king ordered the troops to be withdrawn from the hilly country.

The Kolies, having for such a length of time been engaged in hostilities in defending themselves from the attacks of the royal army, and finding nothing to occupy their attention at home, after hostilities had ceased, were allured to plunder the people who inhabited the Maldesh, lying between the Rajoor district and Trimbuck. The inhabitants of this tract, Gursees, Sombatties, &c. were attacked and driven away, and the country left desolate. However, it is said that Pauperah subsequently settled for some time at the village of Mookny, near the Tullghaut, where he erected a small mud fort. Having one day proceeded to pay his devotions at the shrine of the deity at Peemry, he met five Koly fukeers; one of these, placing his hand on Pauperah's head, bestowed his blessing on him, and said, "Go down to the Konkun, take possession of Jowair, and set yourself on the Gaddy \* there." The Koly replied, that it could not be his destiny to be ever elevated so high; besides a Warley Raja occupied Jowair. The saint remarked, that what proceeded from his lips would be realized. Pauperah assembled a body of Kolies and proceeded northward and descended into the Attaveessy; the country around Peint and Dhurumpoor acknowledged him as their master. From this time he was saluted by his followers as Raja Mooknykur, and the term Mookny has been continued as the surname of the family ever since. It is said that Raja Mookny paid a visit to Goozerat, and that he prolonged his stay in Kattywar for seven years, at the termination of which period he proceeded to Jowair, and asked the Warley Raja to give him as much land as the hide of a bullock could embrace. The Warley Raja, seeing it would be impolitic on his part to offer resistance to a person of such power and influence, gave his consent to the proposal. The hide was cut into very fine shreds or strips, and when all were united and extended along the ground, the Warley Raja saw his small fort and dwelling embraced within the

\* A seat of honor, a throne.

space fixed upon by Raja Mookny. The Warley Raja much disheartened, remarked, "as you have included my dwelling in the part you mean to occupy, it is incumbent on you to give me some place to reside in." Gumbeergur and the surrounding pergunnah were given to the Warley Raja, where his descendants continue to reside.

The King of Beder had been encamped some time at Gungapoor, near Nasrik, when fourteen different Rajas repaired to Gungapoor to pay their homage to the Prince. It is related that the Mahomedan Prince ordered a sumptuous entertainment to be prepared for these Rajas, but all of them, with the exception of Raja Mookny of Jowair, declined sitting down, as they were Hindoos. The Jowair Raja endeavoured to remonstrate with some of them, remarking that although the King was a Mussulman, he was their master. The King was much gratified with the Jowair Raja's conduct, and ordered the covers to be removed from off the trays. To the great astonishment of all present, the dishes which were composed of various descriptions of meat had been miraculously converted into bunches of beautiful white Jessamine flowers. The Jowair Raja had the title of Patung Shaw conferred upon him, and he was presented with dresses and seals of office, and sunnuds or commissions were granted to him, by which he was permitted to retain possession of twenty-two forts, and a country yielding nine lacs of rupees of revenue. The Kolies mention that, while Pauperah was in the employ of the Patell of Khirlay, a Naikwarry sepoy from Ankolla, who had been to Khirlay on duty, asked the Patell to allow his servant Pauperah to convey some things belonging to him to Ankolla; during the heat of the day both lay down to rest themselves in the shade of a tree; the sepoy fell asleep, and when he awoke, he observed Pauperah was sound asleep, and a very large snake bending over him with his hood expanded; on seeing the sepoy move, the snake went off. When the Patell heard of this circumstance, he altered his conduct to his servant; he treated him much more kindly and they eat their meals together; and when it suited him, he told Pauperah, if he was ever particularly fortunate in this world, and if the umbrella of royalty ever shaded his brow, he hoped he would not forget his old friends. Eventually, Raja Mookny nominated the Patell Awary to the patellship of the village of Mookny, and constituted him the chief manager of his domestic affairs; and his descendants are still settled at Jowair. Owing to a quarrel that took place between some members of the Raja's family about the year 1760, which led to a reference being made to the Peshwa at Poona, the Peshwa's Government continued to inter-

tere with the Jowair affairs until about 1766, when the Raja was deprived of the greater part of his country ; at present he has only eighty-three villages, and many of these are very small. His income last year was estimated at ten thousand rupees ; of this sum six thousand were realized by the customs (transit and excise duties) within his domain, and the rest was land revenue. Jowair is under the Collector and Magistrate of the Northern Konkun.

For a period of several generations the eldest of the family of the Kheng clan, a member of the Wanukpall Kool, held the Sir Naikship or chief rank among the Kolies, and was the principal authority under whom the members of the Goturany adjusted their civil and religious affairs. The Kolies speak of a very great innovation having been introduced in the mode of collecting the revenue of the Koly villages, that in some places their fields were minutely measured, and the value of each fixed, and many other matters investigated, all of which led to much oppression among them, and they resolved on resisting the establishment of the new system. There can be little doubt but that this tradition either alludes to the measures of reform that were introduced about two hundred and twenty years ago, throughout the kingdom of Ahmednuggur by that able and celebrated financier, Mullik Uंबर, or to the financial system of the famous Todur Mull, which was established in several parts of the Dukhun by the Emperor Shaw Jehan. The Koly Sir Naik, Kheny, and all of his clan, with many other influential Naiks, thought the time favorable to make an effort to throw off the Mahomedan yoke. We know that much dissension reigned among the Mahomedans of the Dukhun at the above period, but the Kolies were dreadfully punished for their temerity. The Musalmans were highly indignant and enraged at the Kolies conspiring not only to resist and thwart the orders of their rulers, but to endeavour to establish their own independence, or to transfer their allegiance to a person of Hindoo origin. The insurrection took place during the reign of the Emperor Shaw Jehan, and the Kolies may have wished to transfer their allegiance to young Sivajec. An army was marched into the hilly country, and the inhabitants were slaughtered wherever the troops could overtake them ; the Sir Naik and his kinsmen of the Kheng clan were annihilated ; all the hill forts were thoroughly repaired, and a large body of troops left to garrison each for the purpose of controlling the Kolies more effectually, and with the view of making a more lasting impression on them. All of those that had been apprehended were executed, and their heads heaped together, and a platform built over

them at Joonere. The place known by the name of the Kalachubootra is said to be the identical spot. After the recollection of this disturbance had passed away, Zoomajee Bhokkur, the Naik of Peeplegown, Mhur Khora, wished to get the people to elect him their Sir Naik, and he was also desirous to obtain the approval of the Government authority for his assuming it. To secure the favor of the latter, he reported that the rebels in the fort of Koary had a singularly handsome horse of a noble breed in their possession, which he would try to capture for the Emperor, provided he could be furnished with a supply of money from the royal treasury. A large sum was sent to the Koly Naik, Zoomajee Bhokkur, who assembled the Naiks of the fifty Mawils with their retainers, and all of them marched and surrounded the fort. A year and upward having elapsed, and there being no prospect of obtaining possession of the horse, the Kolies were told that they were such a faithless and extravagant set of people that they could not be depended on, and unless they captured the fort in less than one month, a number of the Naiks and followers should be put to death in a very disgraceful manner. This threat frightened the Kolies, numbers of them fled to the jungles during the night, and only the Naiks of twenty-two Mawils and their followers remained with Bhokkur, who gave his people orders to prepare their ladders, determined to try to capture the fort, and die in the attempt, rather than submit to be disgraced. Bhokkur and his confidential friend Bhoirjee Istah, disguising themselves as Dheres (sellers of firewood), ascended the fort, and succeeded in bribing one of the garrison to assist them. At the appointed time this man drew up the ladder and secured it at the top, but when the Kolies reached the place where they were to begin to ascend by the ladder they discovered it was four or five cubits short. Bhokkur now despaired of succeeding, but Istah cheered him on, and remarked that they both together measured much more in height than the extent of the vacant space; "we shall manage it between us, do you get up on my shoulder, and a third person can reach the ladder from off your back." They soon lengthened it, and seventy or eighty of them ascended to the hill, attacked and overpowered the guards, and were moving off with their prize, when an officer, satisfied that to obtain possession of the horse was the cause of the fort being captured, fired and killed the beast on the spot. One of the Mahomedan Princes, being in the vicinity, expressed his great approbation of Bhokkur's daring spirit, and gave orders for his being brought to court, that he might be rewarded for his services. It is said that, owing to an accident

that had befallen Bhokkur, which had much disfigured his face, he was most anxious to avoid making his appearance at court, and that he dressed out a friend of his, and despatched him with directions to say that he was Zoomajee Bhokkur. The deception was detected, and Zoomajee was obliged to attend himself. When he was introduced to the Prince, one of the attendants placed a shield filled with as many gold mohurs as he could carry away with him on the Naik's head. Zoomajee had the title of Munsudgar conferred upon him. Moreover, it is stated that he built a large house at Joonere, under which he had a subterraneous passage or cellar. The tradition maintains that all the riches that Zoomajee \* secured at Koary, and his present of gold mohurs, were lodged in this underground vault, and that it remains there to the present time.

Shortly after the death of Raja Shahoo, when the Mahratta power was in its plenitude, under the management of the Peshwa Balajee Bajeerow, the Poona Government was anxious to obtain possession of all the hill forts in the Syhadry range. The Kolies of the Kotool and Rajoor Dangs were urged to capture the fort of Trimbuk. The clans of Kharay and Bhauggrah took the lead in this expedition, and, by the able assistance of the five brothers of the Puttykur family, who were all distinguished soldiers, noted for their great activity and gallantry, as well as their singular dexterity in climbing up rocky hills that were inaccessible to most men, they secured the friendship of the hereditary Kolies, the guardians of the approaches to the Trimbuk hill, and they bribed a servant belonging to the Killadar ; then having sacrificed a sheep to secure the favor of the tutelary spirit of the hill, and by means of their rope-ladders, five hundred of them ascended to the top of the rock, forming the scarp on the western side, and, without being discovered, they obtained possession of the summit of the fort, upon which they blew their horns for the information of the Mogul garrison ; these were completely surprised, a few only attempted resistance, others

\* It is the general belief that whoever attempted to descend into the cellar was destroyed. Some fifty years ago, Dussajee Bhokkur (who was killed at Hursah) had a son whose name was Zoomajee ; after his father's death, and when he was about twelve years of age, it occurred to several of the friends of the family that it must have been intended that this boy Zoomajee should succeed to his uncestory and namesake's treasures, and that if he would exert himself to obtain the property by descending into the cellar he would undoubtedly secure it. The poor boy was persuaded to try his luck by entering the vault, but he never returned to relate what he had encountered ; there can be little doubt but that the mephitic air destroyed him.



ran about with grass in their mouths entreating for quarter, while others more frightened tried to lower themselves over the precipices, and such as were not killed were sadly mangled. Previous to approaching the fort, some of the Kolies doubting the possibility of escalading the place, two of the Puttykurs volunteered to prove with what facility it could be done. They started and returned in a few hours with the Killadar's silver hooka, to convince the Kolies of the ease with which it might be seized. The Peshwa sent the Kolies forty thousand rupees to defray their expenses. The eldest of the Puttykurs was presented with a palankeen. Kheroojee Naik was presented with a palankeen, and the village of Barree was conferred on him in enam (freehold) to support his dignity. Kheroojee's descendants continue to hold this village in enam under the British Government. The Peshwa now expressed a wish to obtain possession of the forts of Kullurgur, Ruttungur, Allung and Koorung, that belonged to the Koly Raja of Jowair. The same Naiks that captured Trimbuk commenced operations against Ruttungur; the Jowair Raja and his family were at the time on this hill, but the Kolies being acquainted with one of the Musalman Jemadars of the fort, whose family was residing in one of their villages, they got him to fix the rope \* ladders for them on the hill, and two hundred of them ascended to the top, but they had to fight a tough battle with the garrison before the latter surrendered. Including the loss on both sides, there were two hundred men killed and wounded. The Kolies got possession of the other forts also, and the Peshwa sent them thirty thousand rupees to pay their expenses; and Yemajee Naik Bhauggrah of Sakurvary was presented with a palankeen, and the village of Sakurvary conferred in enam on him; his descendants possess it now.

The circumstances of so many of the Koly inhabitants being either employed on the hill forts, or to guard the approaches leading to them, gave the relatives of these people many opportunities of negotiating for the surrender of the forts to an enemy approaching to attack them, for the Kolies acted frequently a very treacherous part on such emergencies. At the time of the struggle between the Mahrattas and the Mahomedans for supremacy in the Dukhun, and especially during the decline of power of the latter, and the factious and

\* The ladders are made of the roots of the creepers *Marr Yellah* and *Yeo-tap yellah*; these are twisted together, and at every cubit or so, a piece of timber is fastened, to be used as a step.

unsettled times of Raghoba Dada, it was not unusual to hear of the Kolies tendering possession of a hill fort for a bribe to a different party to that which had advanced them money to capture it, while the place continued in the hands of the Kolies ; and, previous to their handing it over to the highest bidder, they would carry off all the grain that might be stored in the granaries.

In the year 1760, upon the occasion of the death of Hoorjee Naik Baumlay of Bhoregur, one of the Koly Naiks, who retained the rank of Munsubdar, which had been conferred upon one of his ancestors by the Mahomedan kings of Beder, Jowjee Naik his son, then doing duty at Joonere, applied to the Soobadar of the province to get him nominated by the Peshwa to the situation vacant by his father's death and to allow him to assume charge of the freehold lands, and emoluments that he had enjoyed. Jowjee Baumlay in person was a slight figure, and about the middle size, with a fair complexion ; he was very active and intelligent, and possessed a bold, restless and enterprising spirit, very ambitious, of irregular habits, and conniving frequently at his friends committing robberies in different parts of the country, while he was employed in the pay of Government, before and after his father's death.

Jowjee Baumlay was not much liked by the people in authority at Joonere, especially by the family of the Sawunts, and these persons pressed the Soobadar to reject Jowjee's claim, and as he did not receive any reply to his petition, he felt much mortified, and disgusted with the conduct of the Soobadar, and consequently quitted the place and retired to his village, with the determination of busying himself with agricultural pursuits. But after a lapse of a few years his farming speculations proved unsuccessful, chiefly owing to his improvident habits ; he consequently had no wish to discharge his dues to Government. It was very well known that the numerous robberies that were committed in different parts of the country at this period were chiefly perpetrated by Jowjee Naik's partisans ; and the Soobadar, fearing a serious disturbance would take place if Baumlay was allowed to remain in the jungles, deputed three Naiks for the purpose of explaining matters to him, and to prevail on him to return to his duty at Joonere. He was reluctantly persuaded to adopt their advice, and to accompany them. Jowjee was much thwarted in his expectations at Joonere and became greatly discontented. A year had scarcely elapsed from his return, when the Sawunts and Sindhyas communicated privately to the Soobadar their opinion of Baumlay, stating that he was an unsettled, intriguing, and dangerous

person, and that it was his dependants that committed all the robberies that took place, and the only effectual mode of checking such irregularities would be to destroy the root of the evil, and this could be effected in no other way than by imprisoning Jowjee Baumlay, and making an example of him. If instead of making a severe example of him, they advanced him in the service and invested him with the title of Munsubdar, and conferred lands on him in freehold gift, that he would be rendered all powerful, and would not rest till he succeeded in destroying all those who discharged their duty with fidelity to Government, and had opposed his advancement. The Soobadar was much perplexed with regard to the measures to be pursued towards such a very intractable and insubordinate character, when he was waited on by four staunch friends (one of them a Brahmun) of Jowjee's, who had become acquainted with the advice his enemies had been instilling into the Soobadar's ears. These men pledged themselves in the most solemn manner as securities for his good behaviour, entreating that his life might not be endangered on account of the false accusations of his enemies.

About this time two of the Soobadar's officers (Brahmun) were preparing to join the Peshwa's army in the Konkun, when they were waited on by a Brahmun, who had a great antipathy to Jowjee, and had been plotting his destruction; he informed these two men in confidence what his plans were, and requested them to communicate them to the Beeny Walla or Quarter Master General of the Mahratta army, who would finally arrange matters; he further mentioned that he intended to follow in a few days, and that he would contrive to bring Baumlay with him. One day, when one of the Joonere officers was settling with the Beeny Walla (also a Brahmun) how it would be most advisable to dispose of Baumlay, one of Jowjee's emissaries overheard them, and immediately proceeded with all speed to communicate to him his danger, and convinced him that their object was to deceive him, when they pressed him to join the army with his Kolies. They had determined to persuade him and his Kolies that their services would be required in the attack of the Seeddie of Jingeera, and under this pretext they were to embark Jowjee and his friends, and when the vessel was out some distance at sea, they proposed to sink her. The instant Jowjee learned the particulars of this plot against his life, he fled again to the jungles (Ranburry), being satisfied that if he continued longer at Joonere he would be assassinated. To protect himself against the attacks of his enemies, and to force the Government to comply with his

wishes, he began to assemble his followers for the purpose of levying contributions from the inhabitants, and to plunder travellers. When the Joonere Soobadar heard that Jowjee had again fled to the jungles, he lost no time in detaching a party of Sibundies to seize his family, which they succeeded in doing, and brought them to Joonere, where they were placed in confinement. The troops in pursuit of Jowjee pressed him closely, and rather than exasperate the Soobadar too much, and thinking it might be of service to his family to remain quiet for some time, he quitted the district and went to Candeish. After some time had elapsed, he determined to send some of his kinsmen to the Joonere jungles to gain some intelligence of his family. Accordingly seven Kolies set out secretly for their homes to pick up information for their Naik, and learn something regarding their own families. Of this party were two brothers of Jowjee, Dadajee and Soorajee Baumlay. The seven friends had arrived within a few coss of Joonere, when they unfortunately encountered Ramjee Sawunt, who was employed with a detachment to capture Jowjee Baumlay. Sawunt seized the seven Kolies, and sent them prisoners to Joonere. The people in authority wishing to separate the brothers, Soorajee Baumlay was imprisoned in Hursh, and Dadajee and the other five Kolies in the fort of Chaound. When Jowjee was informed of his friends having been seized and thrown into prison, he immediately advanced to the banks of the Mool river in the Kotool district, where he remained concealed, but exerted his best endeavours to rouse his friends to use their influence to obtain the release of his family and those that had been seized by Sawunt. As Jowjee was persecuted by the Sawunt family, he watched every opportunity of striking a blow at either of the brothers, for he had discovered that the Sawunts were urging the Soobadar to put his own brothers, who were confined in the hill forts, to death. The Soobadar, at length, gave his consent to the Koly prisoners being tied up in leather bags and thrown over the most precipitous part of the hill; the order was punctually carried into execution, except in the case of Soorajee Baumlay and his cousin, both of whom solicited with the most earnest importunity that they might not be tied up in leather bags; they asked that swords might be presented to each of them, that after they had employed themselves some time fencing, and become fully excited, they would leap over the precipice of their own accord. The demand could not, they were told, be complied with, as it was uncertain what persons placed in such desperate circumstances

would be tempted to do, were they armed with swords. However, they were supplied with two sticks, and the poor fellows amused themselves playing at single stick until they became heated, when one after the other sprung down the tremendous precipice, and both were dashed to pieces at the bottom. It was some time before Jowjee recovered from the grief and melancholy by which the intelligence overwhelmed him. His great friends Dewjee Bhauggrah and Dharrow Sablah consoled him with the hope of their getting his family restored to him. They accordingly went to Joonere, and became securities for Jowjee's family, and had them set at liberty; both of these Koly Naiks engaged to prevail on Jowjee to return to his duty at Joonere, but, owing to the impatience of the authorities there, and Jowjee's being much exasperated, and having no confidence in their faith, there was little prospect of his remaining quiet. It was discovered that Jowjee was in the habit of frequently visiting Dewjee Bhauggrah, and the Joonere people sent a party of horsemen to watch his movements, and, if possible, to capture him; but the horsemen failed in their attempt, seized Bhauggrah and took him a prisoner to Joonere. Jowjee was now on the alert again, and, having assembled some of his followers, moved in the direction of Kullumbaie, where he learned that one of the Sawunts had erected a small wooden building on the boundary between Pokry and Kullumbaie, and was occupied with a celebrated Goossyne in rendering himself invulnerable by means of the Goossyne's incantations. Jowjee was determined to avail himself of the circumstance, and instantly proceeded to the spot and attacked Sawunt and the Goossyne, and put them both to death. Raja Sawunt more enraged than ever with Baumlay when he heard of his brother's death, went immediately to Poona, and represented at court the disturbed state of the Joonere district, and declared that there would be no peace while Jowjee Baumlay remained at large. The Poona Government, in consequence, placed five or six hundred men at Raja Sawunt's disposal, for the purpose of apprehending Baumlay. When Raja Sawunt reached Joonere and commenced operations against Jowjee, the latter retired to some distance, and then informed his followers that the most prudent plan would be for them to disperse, while Sawunt could employ so many men in pursuit of them. They consequently separated for the time, and Jowjee retained twelve of his most active, tried and confidential, friends with him. With these he secretly resolved on striking a deadly blow at Raja Sawunt. He got his friends and emissaries to spread such reports through the country as suited his purpose. Raja

Sawunt divided his force into several detachments, and they frequently scoured the jungles, Jowjee's usual haunts. On these occasions, they adopted for some time every customary precaution to prevent surprise at night. Raja Sawunt was encamped on the Ambygown Pathar, and, although by all accounts his sentries were very vigilant, Jowjee had the ground reconnoitred, and ascertained the spot Sawunt occupied. At midnight he advanced to the place where Sawunt was sleeping, and instantly secured him. The troops were panic struck, and hid themselves among the bushes and in ravines. Raja Sawunt had no reason to hope for any pity or sympathy from his enemy, yet the spirit of parental love roused him in his distressed situation to beg and implore of him to spare his son's life, as he was a boy only twelve years old. The terrified lad had concealed himself in a bush, but Jowjee vowed vengeance and would spare the life of neither father nor son; both were put to death, with several of Sawunt's men, who came in the dark to his assistance. The first intimation the Sawunt's family had of this adventure was on the following morning, by the arrival of Raja Sawunt's fine grey mare, which came galloping home covered with blood and without her tail. Baumlay, much delighted with his success, retreated to the fastness of the Hurrychunder hill-fort. This exploit raised him much in the estimation of the Kolies.

After Raja Sawunt was killed, his eldest son urged Government to carry on more vigorous measures for the apprehension of Jowjee Baumlay, and suppressing the disturbances among the Kolies. To prove how desirous the court of Poona was to punish the rebels, young Sawunt had the rank of Soobadar conferred on him, and he was placed in charge of the Joonere district. He proceeded with a reinforcement to take charge of his office, but the accounts of his sudden elevation excited the envy of some of his kinsmen; one of his cousins could not control himself on the occasion, and preferred joining Baumlay to acting a subordinate part under his relative. This man communicated the state of affairs to Jowjee, and mentioned that Sawunt had arrived at Joonere, but as the day was not propitious for him to return to his own house, he was putting up with a friend. Jowjee always on the alert, repaired in the evening with seven of his men to the vicinity of the house occupied by Sawunt; they saw him looking on at a procession that was passing near him; watching a convenient moment, they rushed upon and killed him.

Some time previous to this, he met a man who was in the confidence of Raghoba Dada; Jowjee persuaded him to represent to

Raghoba Dada that he could be of great service to his interests if his highness would only issue his orders to him.

About this time Nana Phurnavees was very anxious to get Jowjee Baumlay apprehended; he sent for the Mokassdar of Joonere, Dadjy Kokatta, and explained his wishes to him, adding that, as he was one of the pensioners of Government, it was his duty to aid in preserving peace in the country. Dadjy expressed his readiness to afford assistance, but he said that, to enable him to succeed against such an enterprising and influential person as Baumlay, the Government must furnish him with two orders. The first to call on him to exert his influence with his Koly kinsmen to restore order in the country, and authorising him to offer any of the discontented Naiks to get their affairs adjusted by representing their grievances to the court at Poona, which would shew that he had sufficient interest to obtain justice for them, provided their claims would appear satisfactory. The second was to be an order authorising him to destroy Jowjee Baumlay, if he could in any way contrive to entrap him. Kokatta was furnished with the necessary documents to assist him in executing the villanous plot he had in contemplation. A few days afterwards, Kokatta and his three sons accidentally encountered Jowjee Baumlay with a few followers in the jungle of Muddossay, in the Ghorenahir. It occurred to Kokatta to try if he had any chance of gaining Jowjee's confidence, and he accordingly joined him; both himself and his sons talked in a grumbling, disaffected manner to Baumlay's people, and seemed to sympathize with them, regretting that none of Jowjee's friends had shown more zeal in his behalf in petitioning Government to investigate the subject of his grievances. After they had been sitting some time conversing together, Baumlay proposed to go to the river to bathe. Kokatta took off his clothes, and hung his Jholna (bag used by natives for keeping betel-nut, &c.) on the branch of a tree. One of Baumlay's people near the spot had the curiosity to peep into the Jholna, in which he saw some papers with the impression of the Government seal. He took one of them out, and as Jowjee's man of business, a Mahratta, besides his cousin Black Bauinlay, were near, they read the paper, and discovered that it was the order authorising Kokatta to put Baumlay to death. They replaced the paper in the bag, and availed themselves of the first opportunity to communicate to Jowjee the very fortunate discovery they had made. Jowjee, in his usual firm and decided manner, said "this information confirms me in the suspicion I had of these villains. We shall easily forestall them, by treating them in the manner they in-

tended to treat us." When they were asleep at night, the father and three sons were consequently put to death.

When a few weeks had elapsed, Raghoba Dada sent Jowjee Baumlay some letters desiring him to capture the hill-forts, and prove his zeal and capability of serving the Sirkar. Jowjee had for a long time been ambitious of carrying on operations on an extended scale, but he wanted to be patronized by some person in authority to induce the Kolies to join him. Raghoba Dada's orders were therefore hailed with joy by these people. Twenty-one Naiks joined Jowjee with their adherents; they lost no time in descending into the Konkun, and captured the hill-fort of Sidghur. The commandant of the fort had a fine gold bangle, which Jowjee deprived him of, and placed it on his own wrist. The fort of Bhyregthur was attacked and captured in a few days, and the fort of Kotta was also soon mastered by Jowjee; just as Kotta had surrendered, a detachment from Joonere descended the Ghauts to raise the siege. Jowjee, with his usual activity, advanced on this detachment, attacked and put it almost immediately to flight. Jowjee had captured the fort of Gorekha, when he was informed, by one of his staunch friends, of a plan of Dewjee Sawunt's to assassinate him. Sawunt had engaged eight Berdurs (who greatly resemble the Ramoossies) to put him to death. Jowjee's vigilance, and the zeal and fidelity of his followers prevented the assassins succeeding in their attempt on his life.

Jowjee, having been so very successful below in the Konkun, determined on trying what he could effect above the Ghauts; he surrounded the fort of Ruttunghur, and, having threatened the Havildar Govindrow Khary, he offered him, through a friend, six thousand rupees if he would surrender the place; the garrison got alarmed, and the gates were opened for Jowjee's men. Allung was captured, and Muddungur surrendered. Nana Phurnavees, who was supreme at Poona, vowed vengeance against Baumlay and declared he would have him blown from a gun the instant he was caught. A detachment from Poona arrived to retake the forts, Jowjee was in the Konkun at the time, but ascended the Ghauts, and commenced skirmishing with the Poona detachment which suffered some loss. Another detachment advanced from the Konkun, commanded by Ghorebollay, and Jowjee skirmished with it while advancing. As Jowjee was now getting surrounded by the Government troops, he informed Dada Saheb (Raghoba) that he had captured a number of the forts, but, as the Poona Government had sent troops to retake them, he hoped he would receive some orders and assistance from him; all



he received were letters from Dada Saheb extolling his services, and exhorting him to continue active and zealous in this cause; he sent a few things to present to those who had been most active, and proved themselves most useful in assisting him ; he added that the English had abandoned their original plan, but he did not mind this—he finished by telling Jowjee not to despair. As Jowjee had greatly excited Nana Phurnavees' wrath against him on account of his having tried to favor Raghoba's cause, he was now anxious to secure the friendship of some persons of rank and influence that could protect him from the minister's vengeance. - Jowjee was on this account more desirous of holding the forts until he could obtain safe and secure terms for himself and his followers ; he sent two of his friends to Dhondoo Mhadeo, the agent of the Soobadar of Nassik, to ask him to give him his advice and assistance ; and Bhauggrah, the Patell of Mullarpoor, who was a great friend of his own was applied to on this occasion, as Bhauggrah was a horseman in Tookajee Holkur's army, and a favorite of Holkar's. In the mean time, Ghorebollay was exerting himself to seize Baumlay, and capture the forts. On one occasion Jowjee was seen ascending the Ruttunghur fort, and Ghorebollay ordered all his men to advance round the hill to stop all communication with the fort, and to prevent any person escaping ; some time after it became dark Jowjee descended the hill by himself, and, notwithstanding every precaution had been taken, he proceeded to join some of his friends on an adjoining hill ; and Ghorebollay, to his great astonishment, heard two days afterwards that Jowjee had gone off to the northward, levying contributions, and plundering and burning the villages that refused him supplies. Ghorebollay was in the habit of severely chastising the Kolies for not shewing greater zeal and activity in aiding the troops. It appearing doubtful whether Ghorebollay would succeed in recovering the hill-forts, or in capturing Jowjee Baumlay, Government assented to settling the Koly disturbance by negotiating with Baumlay for the surrender of the forts. Dhondoo Mhadeo sent a confidential message to Jowjee, recommending him to continue quiet, and, if possible, to join Tookajee Holkur's army, to surrender the forts to him, and that this would enable him to obtain favorable terms hereafter, but that he durst not mention the name of Baumlay to Nana Phurnavees at present, as he seemed fully resolved on punishing all the rebels, but particularly Jowjee Naik. Jowjee made up his mind to follow Dhondoo Mhadeo's advice ; he joined Holkur, who readily promised to speak to Nana Phurnavees in his behalf,

which he did, and suggested that Jowjee should be directed to assemble a body of Kolies, and join the army before the fort of Loghur. The Kolies joined the army, and Jowjee was called upon to exert himself now in the cause of Government; he had some capital rocket men, and advancing one of these men to a favorable position, he pointed out to him the direction in which he was to fire his rocket. Most fortunately, one of the rockets fell among some powder, near the door of the magazine on the hill, which caused an awful explosion, and obliged the garrison to surrender. Jowjee was so delighted with the man's skill, that he took his golden bangle off his wrist, and placed it on the rocket man's.

Holkur, it is supposed, had been in the habit of secretly providing Baumlay with ammunition and stores, to give him a better opportunity of annoying the Government, to serve his own ends. At the time when Holkur quitted Poona for Hindoostan, Jowjee accompanied him to Chandore, where he remained till Dhondoo Mhaddeo had obtained an act of oblivion for him from Nana Phurnavees. It was represented to Government that the best policy would be to conciliate Jowjee and retain him in the interest of Government, by giving him a permanent appointment, as it seemed a most desirable and important measure to preserve order in the hilly country, and as no one seemed better calculated for controlling the Koly Naiks in the Rajoor district than Jowjee Baumlay. It was ultimately determined that a new Soobah should be established at Rajoor, under the designation of the Rajoor Soobah; the forty villages of that district, twenty-two of Malldesh, and in the Konkun sixty villages of the Sakoorly district, twelve of the Bary Ajnoop, and sixteen of the Jurry Seroerssy districts, constituted the new Soobah. The Soobadar was to collect the revenue, and pay the men employed in the hill-forts, as well as the other Police of the district; the revenue of the Soobah was not always sufficient to cover the expenditure, four or five thousand rupees were almost annually drawn from the pergunnahs of Sinnur or Sungumnair. The Soobadar in his magisterial character had only authority to punish Kolies guilty of theft and concerned in gang robberies, but this was equivalent to the power of life and death, for the punishment inflicted was chopping off their feet or hands, and in consequence they frequently bled to death, as their friends were afraid to approach near, until it was too late to afford them necessary assistance.

Jowjee Baumlay was nominated Naik Munsubdar of the Rajoor Soobah, and sixty men placed immediately under him; a portion of

these had the rank of Naiks, the rest were sepoy. They did twelve months' duty for eleven months' pay; one month's pay was deducted on account of *Durbar khurch* or court expenses; they received one or two rupees on advance of pay every month, and their account was settled every six months, or once a year. Jowjee had the village of Takeed in Malldesh, worth eight hundred and fifty rupees annually conferred on him in Jahageer, and he received additional pay yearly, five hundred rupees, in all thirteen hundred and fifty rupees from Government, besides which he was presented with a Bhatt rupee from each village in the Soobah. When he moved about the district on duty, each village was obliged to furnish him and his followers with provisions.

It will suffice here to state that Jowjee was drowned when crossing the Mool river near Kotool. It is said he was not very sober at the time, and it is supposed that Istah, one of the Koly Naiks, led him near a deep part of the river, and then shoved him forward, when Jowjee fell off the rock into the stream; and, as he was struggling in the water, Istah, who had a dislike to him, struck him a blow on the head, which made him sink immediately; this was in July 1789. At the time Jowjee was drowned, he was proceeding to Poona with one of the Ranees from Jowair, whose cause he had espoused, and he entertained hopes of getting her affairs favorably settled and forwarding his own views at the same time.

Jowjee Baumlay was an excessive admirer of the fair sex; he had at least a dozen wives. It is doubtful if one of these, of the Simpee caste, be not still alive; another, a rather noted personage of the Telly caste, died only lately in the Konkun. She had the character of being a great sorceress. Jowjee was succeeded by his son Heerajee Naik.

In the year 1776, several of the Silkunda Kolies of the village of Ootloor had a quarrel with the Patell respecting their right to some ground in the village, and as the Patell and district authorities refused to do them justice, they assembled a large party, and commenced plundering the surrounding villages, and pursuing other violent measures in the hope of obtaining redress. Troops from Poona were employed in pursuit of them, and by some lucky chance (through the management of the widow Rukmabaie of Chass) these surprised the Kolies, and killed and wounded many of them. The Koly leaders were consequently forced to disperse their followers. The Government officers having learnt that Suttoo Silkunda and Kokatta, the two Chiefs of the insurgents, were wandering about the jungles by

themselves, they made the villagers of the Ambygowna district promise to capture the gobbers; the better to ensure this, they obliged them to enter into the Sunkly Zammunny, or chain security, (one Patell going security for two or three cultivators, another respectable Patell for five or six poorer Patells, and a Desmook for a number of the Patells.) Silkunda and Kokatta hearing of these measures, moved off to another quarter. After the troops retired from the jungles, the Kolies recommenced their operations. Several seasons were passed in this way. However, when Jowjee Baumlay was settled at Rajoor, he was ordered by Government to prepare to proceed in pursuit of the rebels; these did not wish to come to blows with Baumlay, and it appeared to be a more prudent and politic plan to enter into some terms of accommodation with those in power, and they effected this through the aid of a Brahmun acquaintance. Circumstances compelled these Kolies to remain quiet for upwards of four years when Suttoo Silkunda repaired again to the jungles, in consequence of the dispute about his hereditary rights not having been \* adjusted.

The troops employed against the Silkunda gang this time having pressed them very closely, soon forced them to disperse, and the Chiefs were induced to go in the direction of Aurungabad. They had taken an oath that they would cut off the Patell of Oottoor's head, unless Government afforded them redress. Nana Phurnavees was resolved on making a severe example of these Kolies; he declared that he would not pardon them again, as they were such a treacherous race that no faith could be reposed in them. At length, one of their friends consented to betray them; this man detached a few Kolies disguised as Goosynes, who gained information respecting the place of their

\* In adjusting boundary disputes between the Kolies during the Mahomedan supremacy, they were in the habit of making the Kolies swear on the Koran; there are some documents several hundred years old, detailing the adjustment of boundary disputes, by which some idea may be formed of the patellships that have been sold, otherwise transferred or become extinct, &c. No subject of quarrel is more necessary to be attended to by us than the settlement of boundary disputes and hereditary claims to dues, more especially when such occur in a hilly or jungly district. No pains ought to be spared on such occasions to ascertain the original cause of the quarrel, and all the merits of the case. The greater the number of the most respectable Patells and other persons associated in the investigation, the greater is the prospect of the disputants being satisfied with the decision; and in the event of one of the parties being discontented, there is less chance of his adopting violent measures to gratify his revenge, aware that such a large portion of the most influential members of the community would be opposed to his wild scheme.

retreat, and a detachment that marched to apprehend them was so fortunate as to bring them all prisoners to Joonere, where the five Silkundas were executed. Bulwuntrow Beriah, brother-in-law to Nana Phurnavees, was Soobadar of the district at the time, and it is asserted Beriah became very unhappy after the execution of these men, that either from remorse or some other cause, he had no peace of mind. Therefore, in the hope of re-establishing his tranquillity of mind and happiness, he erected a temple on the banks of the river near Joonere, in which was placed as the object of worship a Punch Ling, five stones representing the five Silkunda Kolies that had been executed under his instructions.

At the above period there was one of the females of the Silkunda family of Ootloor (Taie Silkunda,) a clever, bold and intriguing woman, \* who had her name enrolled as one of the police sepoy of Joonere. She never shirked her tour of duty; and when she appeared in public, she always had the bow and arrow in her hand, and a couple of well filled quivers strapped cross-wise on her back.

The circumstance of seeing the son of Jowjee Baumlay settled comfortably at Rajoor, led to some discontent and jealousy among the Koly Naiks of the district. The family of the Bhauggrah Patell of Deogown, near Rajoor, at the above period (the end of the year 1798) consisted of three brothers, Govindjee, Myajee and Walloojee: they

\* In 1831, at the time I was engaged superintending the operations carried on for suppressing the insurrection of the Ramoossies in the Poona Collectorate, the civil authority of the district granted passports to various persons that expressed an anxiety to obtain leave to go on in pursuit of the notorious Oomiah, in the hope of being able to capture him, and to secure the reward tendered for his apprehension. One of the most noted of these was a widow named Luchmy Ghautghy. She was a tall, stout woman, with coarse features, marked with the small-pox, and of a daring and enterprising spirit. At the above period she left Poona with a detachment of Sibundies, or irregular Sepoys, armed with matchlock guns, and accompanied by a Brahmun accountant, or man of business. Luchmy having discarded her Sarhy, attired herself in a pair of trousers, an Angrika (a long jacket) and a waist band and turban. Like a native chieftan or soldier, she had a sword stuck in her waistband, and her shield fastened on her back; thus accoutred she led her heroes forth, and lost little or no time in commencing operations, conformably to the good old Mahratta system of accusing, and then extorting fines from suspected persons, and such as were said to favor the Ramoosy insurgents. Those who were thus oppressed by her fled to meat Sassoor, to entreat for protection. Luchmy, uncertain what these complaints might lead to, repaired with her followers to Sassoor, and by way of excusing herself said she could not control the persons that had engaged to serve her, and who, it seemed, had unjustly levied some money from the villagers.

were all bold, active and enterprising men, especially Wallojee. They availed themselves of the general feeling to assemble some Kolies, and commenced plundering in the Konkun. At the termination of a few months, Govindjee Naik was seized, and confined in the hill-fort of Koorung. Myajee fled to a distance, and shortly afterwards died; and his son Ramjee remained with the uncle Wallojee for the two seasons that he continued his marauding system. Govindjee was executed, and it was hoped this would have sufficiently intimidated Wallojee, and force him to abandon his predatory schemes; but it had an opposite effect. Wallojee became outrageous, and increased his gang to upwards of a thousand men; with these he used to march into the Konkun, drums beating, and flags flying. The inhabitants of the low country were always panic struck when they heard that the Kolies were descending to ravage their homes. Wallojee was in the habit of dividing his gang into three or four parties, and little or no resistance was offered to his men, except in those villages in which troops were stationed. On a named day they would re-assemble at a particular place in the Ghauts, divide the plundered property, and then retire with all rapidity and secrecy to their homes. Wallojee kept a few active and trust-worthy men with himself while he remained in retirement near Inchore, for the Jahageerdar of that place greatly befriended him; however, the Koly Munsubdar, Heerojee Naik at length succeeded in capturing him, and with some difficulty brought him to Rajoor, where he was blown from a gun.

When Wallojee Naik was executed, his nephew, Ramjee Bhauggrah, fled into the Konkun, and took refuge with a maternal uncle, then employed at Kullian; but this man also turned a great robber; he was pursued, seized, and executed, and young Ramjee ascended the Ghauts and joined the Bheel insurgents. He acted a conspicuous part in all their subsequent transactions, and, as he continued a turbulent and very troublesome person long after the Bheel disturbance was suppressed, the Government officers thought it would be good policy to engage him in the interest of the State, as he was Patell of his village, and had become a formidable person among the Kolies. He was placed in charge of the police of a district in the Konkun, under the impression that he could check the inroads of his Koly kinsmen above the Ghauts into the villages of the tract under his charge. Bhauggrah proved himself a very able police officer. Some time after the Konkun was transferred by treaty to the British Government, Bhauggrah waited upon the Collector. This gentleman employed the Koly as a peon, but subsequently advanced him to

the situation of Jumadar of police in one of the pergunnahs near the Ghauts. The Koly Jumadar received a Bhatta rupee and a fowl annually from every village within his range ; some of them presented him with a little rice, and he was entitled to a sheep from every flock that passed through his district to the coast. A few years had only elapsed after the cession of the country, when orders were issued prohibiting persons in the service of Government receiving any present or perquisites of office beyond their fixed salary. Unfortunately, in many instances, these orders interfered much in abrogating the long established usages of the country. In fact, the order was a distressing blow to many, for they considered their dignity and consequence, not only seriously diminished by their not being permitted to accept of that mark of respect which their predecessors and ancestors had always received, but their income was most materially affected by the prohibitory mandate. The Jumadar presented several petitions to the constituted authorities, begging that he might be allowed to retain the perquisites, as it had always been the custom of the country for persons employed as he was to receive such dues. He appealed in vain ; and being mortified with the treatment he experienced, he asked for his discharge. There appeared to be very great objections to giving him leave to retire from the service, for he possessed great local knowledge, and was a most active and useful police officer. Six months leave of absence was very reluctantly granted to him, and he proceeded to his village. However, he had no intention of returning to his duty, unless his pay was increased, or permission given to him to receive the perquisites that had been withheld. It was soon discovered that Bhauggrah's services could not conveniently be dispensed with, and a peon brought him a letter from the magistrate, calling on him to return to his duty. He proceeded to the Konkun, full of hope thinking his salary would be increased, or that he would be allowed to resume his dues ; but, after a lapse of many months, he received no satisfactory answer to his petition. Bhauggrah became now extremely discontented, and ready for any mischief.

To explain subsequent events more clearly, I must refer to the arrangement of affairs in the hilly country in 1818. In March of that year, the Koly Naiks and their followers forming the police of the Rajoor district, were taken into the British pay, but the Koly Naik Govindrow Khary, the hereditary Havildar of the hill-fort of Ruttungur, who was a very old man, declined entering into the British service, under the pretext that he was too old. But it was well known that

he refused the offer of employment under the impression that the Peshwa's Government would be soon re-established. The Havildar had twelve of his kinsmen employed as sepoy's under him in the fort, receiving pay from Government, besides various perquisites. The aggregate of their yearly pecuniary allowance was one thousand two hundred and thirty rupees. In this sum was included the revenue of the small village of Bhaudurdara, amounting to two hundred and fifty rupees annually, of which place the Kharies were the hereditary tenants. Most unluckily for these poor people, the Havildar's refusal of service plunged them all into the greatest difficulties, as they no longer received any pay, and the revenue of the village was resumed by the British authorities. The Kharies were sadly mortified, and continued in utter despair. In the course of the following year they became more embarrassed in their pecuniary affairs, as the Rajoor Koolkurnies discovered that they (the Kharies) had been plotting, and some of them disposed to join Narayun Row Holkur's gang, who were at the time (October 1819) in the Nassik district. The rapacious and overbearing Koolkurnies extorted the sum of three hundred rupees from the Kharies on this occasion, and it is worthy of notice that the last instalment of the money was not paid until March 1828. In various parts of the country there were many persons suffering much distress and inconvenience from having lost their employment on the hill-forts; however, the large establishment of regular, but more especially of irregular troops, in the pay of Government, overawed the discontented, and kept them in a state of subjection; yet, as the troops decreased in number, the conduct of many of the unemployed and displaced soldiery, and that of the predatory classes, became more daring. For a series of years the persevering exertions, and enterprising spirit of the Poona Ramoossies were closely, and most anxiously watched by all these people; and the efforts of the Ramoossies were ultimately crowned with considerable success, notwithstanding they were guilty of the most atrocious and violent measures during the years 1825, 26 and 27. Their crimes were pardoned, as it appeared that they could not be put down; they were consequently taken into pay and employed as the local police of the hilly country, and some lands conferred on them. The Koly population unfortunately thought they could not do better than follow the example of Oomiah and his Ramoossies. Many consultations were held by the Koly Naiks on this subject. Jumadar Ramjee Bhauggrah and the Kharies were the chief leaders, but the Koolkurnies of Rajoor, were aiding and abetting in the plot; as were the Police Naiks of Rajoor, for their pay and al-



lowances were considerably reduced under our Government, which rendered them extremely discontented. It was finally determined that the Khary family should send in a petition to Government, claiming a restoration to their rights, and of being employed either in the police of the district, or on the hill-fort of Ruttungur. But they were of opinion that their petition would be more readily listened to, were it known that they were in arms, and had taken up their residence in the jungles when it was forwarded. Accordingly Kassybah Khary, the youngest son of the late Havildar of Ruttungur, proceeded to the hills with several of his relatives, and forwarded their petition to Ahmednuggur. Kassybah Khary was joined in a few days by Jumadar Ramjee Bhauggrah, who deserted from the Konkun with two of the Koly police-men; this was in the latter end of the year 1828. In January 1829, I proceeded to the western Ghauts, taking with me a small detachment of the police corps, for letters had been received by the magistrate from the Mamlutdar of the Ankolla district, reporting that the inhabitants had become greatly alarmed, as several hundred Kolies had assembled in the hills for the purpose of plundering them.

Although the gang was chiefly composed of the people of the district, there being one, two, or three persons from nearly every village, yet for the first two days after we had entered the hills no satisfactory information could be obtained respecting the insurgents. The Brahmun Koolkurnies of Rajoor, and some of their friends, strongly recommended that the troops might not be employed, and that the leaders of the band should be assured that if they refrained from plundering and remained quiet, Government would make some provision for them. Those Brahmuns further asserted, that if the troops attempted to follow the insurgents they would have no chance of overtaking them, and if the Kolies were once fired on, they would immediately begin to plunder and burn every village they approached; that when the troops would approach them, they would plunge into the ravines covered with jungle, and at the moment they imagined they had succeeded in surrounding the Kolies, the latter would shortly afterwards be seen passing over the summits of some of the highest hills.

In fact, they had settled that the sepoy could never penetrate the tangled thickets of brushwood, or pass along the rugged and difficult footpaths \* accessible only to themselves.

\* They were much astonished the first time they saw a detachment of the police corps cross a range of hills by one of the most difficult tracks, and which was considered by them impassable to sepoy. The men on the above occasion were dressed every one after his own fashion, the only thing they were required

As troops employed to suppress a disturbance in a hilly and jungly country can seldom or never accomplish in a successful manner the duty they may be detached upon without the cordial co-operation of a portion of the inhabitants of the district, several intelligent men of the police corps had been previously instructed to exert their best endeavours to gradually conciliate some of the Kolies, and to obtain from them the information we were so much in want of. These men had been frequently employed on similar duty, and succeeded extremely well in the present instance. By this means information on the following points was communicated; the number of the insurgents, the wish and hope of the inhabitants of the hilly tract that they might succeed in their object, the strong nature of the country, and the very great advantage of acting promptly and with decision, at the same time employing an adequate and overwhelming body of troops. In the mean time little notice was taken of the Bund, (the insurgents,) a detachment having been merely advanced towards them for the purpose of gaining information, but with strict injunctions not to molest the Kolies, and not to attend to any threatening messages sent by them. A proclamation was sent to their leaders requiring them to disperse their followers, and to present a petition to Government respecting any grievances they had to complain of, and intimating that no letters or petitions from them would be attended to while they continued in arms.

The names of nearly all the persons composing the Bund were now ascertained; also those of the relatives and friends of the Chiefs, and other Koly Naiks, and of the villages they resided in. The names of such persons, male and female, as were likely to assist them with supplies, and communicate intelligence respecting the movement of the troops, were noted down; also a description of the most noted hiding places, and of the foot-paths leading over the different ranges of hills, with an account of the spots where water was procurable in ravines or beds of nullahs, and on the tops of hills. The detachment from Bhewndy was stationed at the bottom of the passes leading into the Konkun, and the other detachments that arrived from Mallygown, Ahmednuggur, and Poona, were posted in the situations considered most desirable for them to occupy, while lightly

to attend to was that they had abundance of amunition, and to be careful of their muskets. This event tended much to depress the spirit of the Kolies, while the enthusiasm and confidence of the troops were proportionately increased.

equipped parties were selected to be employed in constantly searching the haunts and lurking places of the Kolies.

The insurgents a few days previous to the arrival of the troops had begun to levy contributions from the inhabitants; they also plundered at different times three small villages, but all these irregularities were soon put a stop to, and it became necessary for them to separate in small parties. The few Bheels that had joined them, returned to their homes, and many of the Kolies fled to a distance; therefore, to ensure the capture of the Chiefs, and of those that remained with them, detachments, with a certain number of the inhabitants, were posted near the different tanks and pools of water in the hills. This arrangement greatly perplexed the Kolies; and, as many of the inhabitants espoused our cause very warmly, the two Chiefs, and upwards of eighty of their followers, were captured in about two months, and marched to Ahmednuggur. The early and successful termination of the service must be chiefly ascribed to the great zeal, and unceasing exertions, of all the officers and men engaged in the service, which was one of a most fatiguing and harassing nature.

One of the most enterprising characters in the Bund, of which I have just given a short account, was a Koly named Rama Keerva. He was a stout and powerful man, with an extremely fine figure and good features, but of a very unsettled and daring spirit, and noted among the Kolies for excelling them all in agility. Keerva quitted the Bund when they began to be much pressed by the troops, and moved to the southward, accompanied by about twenty-five men. He meditated, on several occasions, attacking some of the detachments when they appeared fatigued after searching the jungles. He had been for some ten or twelve years concerned in many robberies. He persuaded four or five of the Kolies that had quitted the late Bund, to remain with him, rather than return to their homes. They chiefly lived in caves, occasionally moving about the country, and visiting their friends. As he had many acquaintances among the Bheels along the banks of the Pera and Godavery rivers, he sent two of his Koly friends to some of the Naiks, inviting them to join him on a plundering expedition into the Konkun. Early in the month of January 1830, about thirty Bheels joined Keerva, who had assembled an equal number of Kolies who were at the time in the hills, south of Kotool. As the Kolies, &c. around Joonere and in the Ghorenahir quarter had been plundering both above and below the Ghauts, detachments of regular troops were moving about to apprehend them. A few men of one of these detach-

ments (of the 11th Regiment) under a Naik were encountered by Keerva's gang, at the small village of Nandwa in the hills south of Kotool. The party were called upon to ground their arms and surrender. This they refused to do, and were consequently attacked by the Bheels and Kolies. The sepoys occupied a very small temple, and managed to keep their assailants off for several hours, until a detachment in the vicinity came to their relief. Several of the sepoys were killed and wounded. Keerva proceeded with his gang into the Konkun, plundered the village of Kinnouly, and afterwards divided the spoil, amounting to seven thousand five hundred and ninety rupees, when they reached the Ghauts; the greater portion of it he gave up to the Bheels. The Kolies separated, and the Bheels, returning to their homes, were pursued by a detachment of the 17th Regiment N. I., under that very active and most zealous officer the late Captain Luykin.

I have omitted to mention before, that portion of the hilly tract of country lying south of Hurrichunder forms the western boundary of the Poona district, while that part extending northward from the same hill-fort forms the western boundary of the Ahmednuggur district. Troops were out now in pursuit of the Bheels, Ramoossies and Kolies that had been committing depredations in the latter part of 1829, and beginning of the year 1830. Many of the officers and men employed had been out the previous season, and had consequently become well acquainted with the inhabitants and the localities, and all were actuated by an unusual spirit of enthusiasm, and willingly shared the fatigue and labor of the harassing duty. Although the services and exertions of all were so great, yet it would be very unjust to the memory of the late Lieutenants Lloyd and Forbes, the former of the 11th Regt. and the latter of the 13th Regiment, were I not to mention that they greatly contributed to the restoration of tranquillity in the hilly country. A number of prisoners were taken to Poona and Tanna, and Rama Keerva, with several other notorious leaders and their followers, were brought to Ahmednuggur, where Keerva was executed. Some years previously, detachments from the Konkun had endeavoured to capture Keerva, by surrounding him in his house at night, but he invariably contrived to escape. As the Havildar commanding one of these parties was the Koly Patell of a village near Kotool, Keerva set fire to his house, by which he lost property worth several hundred rupees. I have before noticed that this practice of retaliation is common among the Kolies, and I had soon an opportunity of making an effort to check such a

system. Two nights after Rama Keerva was seized, the house of the man that gave the information which led to his apprehension was burnt, with the dwellings of four other persons; two of these were extremely poor, and one of them a widow. I therefore had the loss of each person ascertained, and valued as nearly as possible, and allotted to the two poorer persons three times the value of the house and grain that were destroyed; and to the other three I gave double the amount of the property consumed by the fire. I instantly circulated a proclamation offering a reward of five hundred rupees for the apprehension of the incendiary, and announced to the people, at the same time, the determination of the authorities to afford protection to persons who suffered injury in their person or property for having rendered useful service to the State.

I shall close this memoir by mentioning, that the inhabitants of the Kotool and Rajoor districts showed a very great desire to aid the troops in the service on which they were employed, and that while acting independently, and without any of our troops being near them, they seized a number of the Bund, and brought them prisoners to camp.

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## ROYAL GEOGRAPHICAL SOCIETY.

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*At the General Meeting, May 16, 1836, the following Report from the Council was read :—*

The Council again report to the Society the state of its affairs.

**FINANCES.**—The financial aspect of the Society continues satisfactory. The extraordinary expense incurred during the last year consists of 175*l.* towards the expedition behind British Guiana, of which the plan has been before explained, and the operations will be subsequently detailed ; and of 74*l.* 8*s.* paid for the purchase of books and maps. One item of extraordinary receipt appears in the balance-sheet annexed, viz.—1000*l.* received from his Majesty's Government on account of the two expeditions behind British Guiana, and in the interior of South Africa, in which the Society takes an interest ; but exclusive of this, there is little to invite particular attention in the year's accounts,—excepting only the gratifying fact, that adding the payments now made to preceding ones on account of the two expeditions, the Society has already advanced nearly its whole original subscription to them—500*l.*—out of its ordinary income, without touching its capital stock invested in the funds : a gratifying proof, the Council is willing to think, of its Continued prosperity.

**PUBLICATION.**—The Society's Journal<sup>f</sup> has been again, in 1835 as in former years, published in two parts ; and the first part of that for 1836 is now, on the same plan, laid on the table. The demand for it by the public, exclusive of the copies issued gratuitously to members, continues ; and the sum of 112*l.* has been received in the present year from the Society's publisher on account of sales made during that to which the present report refers. Credit will, accordingly, be found taken for this sum in the annexed estimate of the probable receipt and expenditure of the current year.

The Society's other publications, announced in the report of last year, have not yet advanced to maturity. Some unexpected delays,

arising from the nature of the work, have occurred in bringing forward Mr. Howse's Grammar of the Cree Language ; and the unfortunate death of Mr. Macdougall of Copenhagen, who was drowned at Largs, in Scotland, while on his way to London in October last, has in like manner delayed the appearance of his translation of Captain Graah's Account of recent Danish discoveries on the East Coast of Greenland. Both the MS. and map connected with this publication are, however, now received, and it seems scarcely doubtful that both it and the Cree Grammar will appear within the present year.

**HIS MAJESTY'S DONATION.**—The Royal Premium for 1835 was awarded by the council to Captain Back, for his recent Arctic discoveries ; and was bestowed, as all the previous premiums have been, in money, as received from his majesty's privy purse. The subject of converting a portion, however, into a medal has been long under the consideration of the Council ; and after examining a variety of devices for this purpose, two were lately submitted to his Majesty, and his gracious pleasure was taken both as to the question of converting a portion of his annual donation into a medal, and on the choice between the select devices. In consequence, a near prospect appears of concluding this arrangement. His Majesty has been pleased to approve both a medal generally, and of one particular device for it ; a drawing of which has accordingly been placed in the hands of Mr. Wyon, who is now engaged in completing it, and the expense of this will be found in the estimate for the current year.

**AUXILIARY ASSOCIATIONS.**—No further accession of strength or funds of this kind have been received since the last annual meeting. But the Council cannot omit the present opportunity of acknowledging, with much gratitude, the zeal and exertions of the Bombay Branch Society in promoting its general objects. Within the last year some extremely valuable communications have been received from it, some of which have been published in last year's Journal, while others appear in the Part now laid on the table. Some other papers also have been received within the last few days.

**ORIGINAL EXPEDITIONS.**—In these the last year has been unusually abundant ; and, as in some of them the Society has been led to take a peculiar interest, the Council feel it a duty to advert to them here somewhat in detail.

The first in interest, and also in date, is Captain Back's to which as already noticed, the Council awarded his Majesty's Royal Premium for last year ; the general facts concerning it are so well known that perhaps little need be said here regarding them. It will be seen,

however, by a reference to the Part of the Journal now laid on the Society's table, that the discoveries made in the course of this expedition have powerfully revived public curiosity regarding the geography of the Arctic shores of America; and that the Council was induced, consequently, to appoint a Committee to examine various plans submitted for its further investigation. Communications of this kind were accordingly received from the President of the Society Sir John Barrow, from Sir John Franklin, Dr Richardson, Captain Beaufort, and Sir John Ross; and these were eventually laid before his Majesty's government by a deputation of the Council, composed of the Earl of Ripon, Sir John Franklin, and Captain Back, who were commissioned to express at the same time the earnest desire of the Council and Society, to see one or more of the plans explained in them carried into effect. The consequence has been that his Majesty's Government has been pleased to attend favorably to these representations. Captain Back has been appointed to the command of his Majesty's ship *Terror*, and to proceed with her to Wager River, on the western shore of Sir Thomas Roe's Welcome. He is there to ascertain the most convenient place for transporting boats and stores across the intervening isthmus; and, having placed his ship in security, he is to proceed, with the resources thus placed at his command, both north and west along the shores of Regent's Inlet, to connect the point whence he will thus start, both with Hecla and Fury Strait and Point Turnagain. The utmost diligence is using to expedite his outfit; and it is hoped that he may be able to proceed in his enterprise by the first week of June.

An extremely interesting voyage was also made last year by Lieutenant Smyth, of the Royal Navy, down a portion of the Huallaga and Ucayali rivers to the Amazon, and down the latter to the sea. Lieutenant Smyth was serving in his Majesty's ship *Samarang*, on the coast of Peru, when the proposal was made to him by the merchants of Lima, to undertake this service; and although, in some degree, he has been unsuccessful in the principal object proposed, viz., an attempt to descend the Pechetea to the Ucayali, and thus determine the quality of the upper navigation of this river, yet, by the observations which he was enabled to make of the general character of the country, and the hearsay information concerning it which he was otherwise enabled to procure, he has left little, or it may be said no doubt of the general fact that from Pozuzu, on the Pachetea, 80 miles from Huanuco, 120 from Cerro di Pasco, and 300 from Lima, an easy navigable passage exists to the Atlantic, were the banks of the rivers cleared of the barbarous tribes which infest some parts of them: a fact which may prove,



at no distant period, of great importance—Upper Peru and Bolivia apparently super-abounding in marketable commodities, and requiring only the habit of trade with Europe to have their resources developed.

¶ The precise accessions to geography made by Lieutenant Smyth consist otherwise in the determination, in many cases astronomically, of a number of points along the rivers above mentioned; of the rectification, accordingly of their course, as previously laid down; of some detailed statements regarding the Rio Negro, resting on the authority of a Portuguese priest residing at Barra, which are contained in a paper now published, addressed by Mr. Smyth to the Society, and in the views given by him of the state of the native Indians in this direction. For these matters in detail, reference must be made to his published work.

The two expeditions directly patronized by the Society next claim notice. Of these, the one into the interior of South Africa from Delagoa Bay has been entirely suspended by the Caffree war, and a year has thus been lost in its prosecution. This interval, however, it is not to be doubted that Captain Alexander has turned to account by gaining experience in South African manners, and facility in the use of the native tongues; and he is probably at this moment leaving the Cape on his original errand, better prepared than he could have been last year to accomplish the task before him. Mr. Schomburgh, on the other hand, has entered on his field of inquiry, and the Council has already received two detailed reports of his proceedings, which would have been now published, but that they are as yet imperfect from the want of a sketch map. The following abstract, however will exhibit his general progress.

His instructions were—as follows :—

I.—*Regent street, 19th Nov. 1834.*—“SIR,—I am now authorized and directed by the Council of the Royal Geographical Society to pledge it definitively to co-operate with you in carrying into effect an expedition of discovery into the interior of British Guiana, on the following conditions:—

“1. The expedition is to have two distinct objects, viz.—first thoroughly to investigate the physical and astronomical geography of the interior of British Guiana: and, secondly, to connect the positions thus ascertained with those of M. Humboldt on the Upper Orinoco. The second of these undertakings is not to be begun till the first is completed; and the two together are to occupy a period of three

years from the time of your departure from George Town in the prosecution of your journey. . . .

" 2. Towards the expense the Society will contribute 900*l.* viz. —600*l.* the first year, the outfit, estimated at 200*l.*, and all pecuniary advances whatsoever, included; and 300*l.* during the two following years, to be advanced in such proportions as may seem mutually most desirable. The Society will also procure you such letters of introduction and recommendation as may seem calculated to promote the objects of the expedition. But it will not be responsible for any debts or expenses which you may incur beyond the sums above specified.

" 3. In return you are to proceed to Demerara, at your early convenience, and there report your arrival to his Excellency Sir James Carmichael Smyth, Bart., or other, the Governor of that colony for the time being; receiving instructions from him in the name of the Society, and acting at all times on these instructions to the best of your ability.—(For the general nature of these instructions, but subject to modification as may seem afterwards expedient, see my accompanying letter of this date, marked No. II.)

" 4. All geographical information obtained by you during the above period of three years, whether physical, political, or astronomical, shall be considered the property of the Society, and at its disposal to be published in any manner it may think fit. But collections of natural history shall be your property—with the exception of one set of any collections you may make of dried plants, birds, fishes, or insects, which the Council would be happy to have it in its power to present, in your name, to the British Museum; and one set of any geological specimens procured, which it would, in like manner, desire to present (if possible with accompanying memoirs from you) to the Geological Society of London.

" I am also authorized by the Council to inclose you a draft for 50*l.* (which I must, at the same time, remind you will be deducted, together with the expense of outfit, from the 600*l.* allowed for the first year) to defray your current expenses to Demerara; and your negotiating this draft will be considered an expression of your acquiescence in the above terms.

" I have the honour, &c.  
(Signed) " A. MACNOCHIE."

II.—*Regent-street, 13th Nov. 1834.*—" SIR,—Referring to my letter No. I., of this date, I now proceed to sketch out the general views entertained by the Council of what your proceedings should

be, on and subsequent to, your arrival in Demerara. Substantially too, it is presumed that these will be adhered to, though it does not appear desirable to complete their detail till you shall have seen Sir Carmichael Smyth, and ascertained his opinions on the subject.

" You will observe that the objects of the expedition are specific, and more limited than were originally contemplated in your sketch. This arises partly from the extreme desire of the Society, in return for the patronage extended to the undertaking by his Majesty's Government, to do full justice to the physical geography of the colony of British Guiana—partly to the extended, and about to be renewed, labors of the Geographical Society of Paris in French Guiana, which promise to render investigations in that direction unnecessary, the French travellers there having instructions to connect their observations with yours.

" Accordingly, the Council wishes you to understand most distinctly that, for the first year, or eighteen months, every thing is to be subordinate to the object of thoroughly investigating the physical character and resources of that portion of the central ridge traversing this part of South America, which furnishes tributaries to the Demerara, Essequibo, and other rivers flowing into the Atlantic, within, or immediately contiguous to the British colony of Guiana. The limits of this may be roughly defined to be the meridians of  $55^{\circ}$  and  $62^{\circ}$  west longitude from Greenwich; and the general character of its mineral composition, with detailed accounts of its plants, and the astronomical determination of a reasonable number of its principal points, will be required of you before you proceed further. Particulars regarding its soil and climate, the origin and course of its rivers, the degree in which they may be severally navigable, or capable of being made so, &c. will also occupy your attention; and generally, whatever may tend to give an exact idea both of the actual state and future capabilities of this tract of country.

" When your researches here shall be completed, then, but not till then, it is contemplated that you may pass the mountains, and extend your views to the further interior. The great object in this, as already intimated, will be to connect your positions with those of M. Humboldt on the Upper Orinoco; for as the French travellers will bring down their labors from the eastward, it will only remain for you to proceed westerly. In attempting this, the Council, as at present informed, is against your descending the Rio Branco, as you propose—afterwards to ascend the Rios Negro and Padaviri. Much of this tract is already known; and if there be any jealousy whatever

on the part of the Indians against the Spanish colonists, it will be more difficult for you to ascend the Orinoco from Esmeralda than to descend it by keeping the height of land throughout. But regarding this, it will probably be in your power to make important communications while yet employed within the colony, so that it is unnecessary at present to enlarge on it.

“ Your proposed expedition up the Cuyuny to explore the Sierra Imataca would be interesting, if practicable, with a due attention to the other objects of the expedition. But as this district is not within British Guiana, and a minute knowledge of it would not further your ulterior views—besides which, it is easily accessible at any time, and its investigation now would cause an expense which might be inconvenient—it must not be made a first object. With regard to it you should be guided entirely by the opinions and advice which you may receive, particularly from Sir Carmichael Smyth, at Demerara.

“ The expedition into the interior cannot be begun till August ; consequently, in so far as regards it, your arrival at Demerara before June is of little importance. But if you attach extreme value to Imataca yourself, and think that you can accomplish a journey to it between the time of your earliest possible arrival at Demerara and the month of August, then you are at liberty to proceed thither earlier—always remembering, however, both that the expense of such a journey, even if sanctioned by Sir Carmichael Smyth, must be deducted from the entire funds provided ; — and also, that if deemed imprudent, or otherwise inexpedient, by him, it will not be allowed at all.

“ Other circumstances connected with the present state of the colony of Demerara seem to offer additional reasons against your precipitating your measures. But having thus fully explained the views of the Society on the subject, something must necessarily be left, in conclusion, to your own judgment and discretion.

“ I have the honor, &c.

(Signed) “A. MACONOCHE.”

In pursuance of these instructions, then, Mr. Schomburgh left George Town, Demerara, on the 21st of September last, and remained some days at the post at the confluence of the Cuyuny with the Essequibo, engaging Indian rowers and other attendants to accompany him. He availed himself of this interval to ascend the Cuyuny some little distance, and to gain a cursory knowledge of its upper navigations. This, he was told, continues uninterrupted almost to its

source, where, being separated by only a short portage from the Carony, the Indians are in the habit of crossing to that river ; and by descending it and ascending the Orinoco, maintaining an inland communication even with Angostura. Quitting the Cuyuny, Mr. Schomburgh next ascended the Essequibo ; and in his reports gives a lively picture of the richness and exuberance of the vegetation on its banks. He and his party suffered much fatigue and some sickness at this time, but, overcoming all difficulties, they entered the Ripanuny on the 23rd October. Ascending this, they then entered the Creek of Anna-y, which falls into it on its right bank, about twenty miles above its confluence with the Essequibo ; and here, at what is usually considered the S. W. extremity of the British colony, they formed a temporary habitation, or head-quarters, whence they proposed to diverge in all directions, as occasion might serve, in the prosecution of their purpose, thoroughly to ascertain the mineral and vegetable character of the neighbourhood. From this point, therefore, Mr. Schomburgh's first report was dated—the period the 29th October ; his second brings the account of his proceedings down to the 15th January, 1836. The interval had been passed in ascending the Ripanuny as far as it had been found possible to push the lightest canoe, which was to lat.  $2^{\circ} 36' N.$ , whence it appears that the sources of this river are further south than have been imagined ; and Mr. Schomburgh thinks that they are at least in  $1^{\circ}$  or  $1^{\circ} 30' N.$ , but they were not actually reached by him. His descriptions of the country thus penetrated by him are interesting, from the high character of fertility which he attributes to it ; but until his map shall arrive little can be made of his topography. He diverged at intervals from the course of the river, and visited Lake Amucu, stood on the highest ridge of the Parima mountains, examined their structure and vegetation, in particular brought away specimens of the plant from which the famous Wourali poison is extracted, and examined carefully the indications of mineral wealth which the rocks contain. The Council hopes shortly to be able to communicate the whole results in a more satisfactory manner to the Society, when the remaining materials for doing so shall have arrived.

The expedition to the Euphrates under Colonel Chesney went out so well provided with scientific instruments and observers, that there can be no doubt that many interesting details regarding the geography of that river and its neighbourhood will eventually be obtained, through its means ; but as yet no communications of this sort have been received from it.

An interesting and important expedition went from the Cape of Good Hope last year, to endeavour to penetrate beyond the utmost extent yet gained to the N. E. by the missionaries and traders; and a gentleman, Dr. Smith, was placed at its head, who, by his general knowledge of natural history, seemed well calculated to make the most of the opportunity which would be thus afforded of determining the physical, as well as astronomical geography of the interior in this direction. Accordingly, after an absence, in all, of nearly nine months, he has recently returned to the Cape with a large collection of observations and specimens, it is said, of great interest. The particulars are not yet precisely ascertained; but it would appear that the expedition had penetrated beyond the parallel of Delagoa Bay, though without reaching the Great Lake said to exist north of Kurichane. The inhabitants had been every where found friendly, without any apparent existence among them of a slave trade, or much intercourse of any kind with the coast; and occupied, as the other natives of this portion of the African interior, with agriculture and pasture. A severe drought, which visited them this last year, and also much inconvenienced Dr. Smith and his party, had generally reduced them to severe distress.

Another expedition, but on a smaller scale, also left England in October last for the interior of Africa; but it has not as yet, made much progress. It was headed by a gentleman of the name of Davidson, who defrayed the whole expense himself, and proposed, if possible, to proceed by way of Fez to Tafilelt, and thence, after examining the southern slope of Mount Atlas, to Nigritia across the Sahara. The first part of this project has been already foiled, the Emperor of Morocco not having allowed Mr. Davidson to proceed by way of Tafilelt, but required him to follow the route by Mogadore and Wady-Noon. In the remainder he expects great assistance from the attendance of a native of Timbuctoo, a very remarkable man, of whom, and of the information furnished by him, a detailed account will be found in the new Part of the Journal. Both travellers, when last heard of, were in good health at Mogadore.

**FOREIGN AND COLONIAL CORRESPONDENCE.**—The vacancy in the list of foreign honorary Members, which existed last year, has been filled up since by the election of Admiral de Hamelin, *Chef du Dépôt de la Marine Royale de France*. Several additional corresponding Members have been also elected within the year; and the Council has great pleasure in witnessing the gradual and steady

increase of the foreign and colonial correspondence of the Society.

**LIBRARY.**—A list of the accessions made to the library within the year is laid on the table with this Report, and will be printed with it. The progress made towards obtaining a suitable collection of books and maps is still far from satisfactory.

*At the Anniversary Meeting held in the Town Hall on the  
4th May, 1837.*

The Members of the Committee of Management were re-elected for the ensuing year.

The Secretary read the following

**REPORT OF PROCEEDINGS OF THE GEOGRAPHICAL SOCIETY FOR  
1836-37.**

During this year the Society has received a considerable accession to the list of members, the number of gentlemen who have joined since April last being twenty-one.

Compared with the preceding year, there is likewise an increase in the number of the contributions which have been received; these amount to 15, of which 5 have been presented by Government, and 10 communicated by the authors of the respective papers.

The plan now followed of printing, as frequently as the means of the Society will admit, selections of the papers which we receive, renders it unnecessary to furnish at present any detailed account or analysis of these contributions, as was formerly the practice in drawing up our annual reports.

A useful kind of contribution has been received from several gentlemen during the year, consisting of well selected collections of geological specimens, taken from interesting localities. These, when properly arranged, will form the nucleus of a useful Geological Museum; an object much required in this place, and the want of which has often been complained of by scientific visitors, and persons preparing to travel in this country, who have not had the advantage of access to European collections.

The gentlemen to whom the Society is indebted for these donations are—Captain Moresby, I. N., for a very interesting collection of rocks from the Maldives; Captain Fulljames, for specimens of the alluvial and tertiary strata penetrated in boring in the neighbourhood of Gogo; Lieutenant Ethersey, for a collection of tertiary rocks and fossils, taken from the Island of Perim in the Gulf of Cambay; Captain G.

L. Jacob, for a variety of specimens of iron ore from various localities in Kattywar; Lieutenant Postans, for a collection of Cutch fossils; Doctor Morehead, for a collection of mountain rocks from Scotland; and Lieutenant Ayrton, for a series of rocks illustrating the English coal-measures. The two last donations will be found very useful for reference.

*Officers engaged in Surveying.* It may be useful here to lay before the Society a brief notice of the labors of those officers who are at present employed on duties, in which the Society will feel a lively interest, as being closely allied to the object of our institution.

*Surveys of the Indus.* The mission under Captain Burnes, with whom three scientific officers belonging to this Presidency have been associated, will doubtless furnish every information necessary to complete the geography of the main stream of the river Indus between Attock and the sea, as well as of the provinces situated along the banks of that river (particularly the western bank) between the northern frontiers of Scinde and the confluence of the Indus and Cabul rivers. But respecting the objects and progress of this mission, no further information has been received by the Society than that already possessed by the public.

To explore the regions west of the Indus, particularly Belochistan an enterprising officer started from Bhooj Cutch in January last. He crossed the Thurr in an almost direct line to Khyrpur, and arrived safe at Shikarpoor in his progress to the countries which form the chief object of his travels. The Thurr, it is said, was found by this officer to present a less desolate aspect than he anticipated, or is generally believed. Water was abundant on the line of his route, and the country was observed to be traversed by ranges of low hills, composed of sandstone, and thickly wooded.

The survey of the mouths of the Indus, commenced by Lieutenant Carless, I. N. in January 1836, has been continued during the present season. The result of Lieutenant Carless' labors during the first season of this survey has been printed by order of Government. A report of the progress made during the present year has also been forwarded, which, if not to be printed by Government, will, it is hoped, be presented to this Society.

The Kedywaree branch has been surveyed from its mouth to its efflux, and the main river up to the point where it throws off a small stream called the Teeteeah, a distance of 35 miles. The great bank lying off the mouths of these rivers has also been thoroughly examined, with all the channels leading across it. The Hujamree branch was



completed the year before, and we have now a trigonometrical survey of all the *open* mouths and branches, with a portion of the main river and the most dangerous part of the coast.

On leaving Scinde, Lieutenant Carless stationed there two young officers under his orders, Messrs. Grieve and Whitburne, to repeat the observations on the periodical swell of the Indus, &c. between Hyderabad and Sehwan, which were carried on during the preceding season so successfully by Lieutenant Wood, I. N., the results of whose observations are printed in the report above mentioned.

*Survey of the Coast of Kattywar and Gulf of Cambay, &c.*

The examination of the western coast of Kattywar as far as Diu island, including the survey of Bate harbour, having been previously completed by the late Lieutenant Whitelock, assisted by Mr. Jones, Lieutenant Ethersey, I. N. has been enabled this season to finish his survey of this Gulf which was commenced in 1834. His operations have extended from Diu Island to Goapnauth point, along the Kattywar coast, around the head of the Gulf, and down its eastern shore as far south as Surat, including the mouths of the important rivers which discharge their waters into this arm of the sea—the Sabarmutty, Myhe, Dhardur, and Nerbudda, the latter of which he has examined as far as the city of Broach. This service has afforded Lieutenant Ethersey the opportunity of observing attentively, for two successive seasons, the Bore, or rushing tide, which is witnessed at the head of the Gulf, and on this interesting phenomenon he has drawn up an excellent memoir, which has been presented by Government to this Society. He has likewise laid down with laborious detail the extensive shoals called the Malacca banks, fixed the position of, and ascertained the soundings along, that part of the coast of the Northern Concan extending between St. John and Bassein.

Adjoining the southern limit of Lieut. Ethersey's survey, 65 miles of coast line remain still to be examined, between Domus at the mouth of the Taptee and St. John's, and again between Bassein and Bombay.

Captain Cogan's survey of the coast in 1828 (including the survey of Bombay harbour) extended between the latitude of this Island and the mouth of Bancote river. From that point south to Cape Comorin, no recent, detailed, or scientific, survey of the western coast of the Peninsula has yet been made; and it is notorious that the general position of this line of coast was, until a very few years ago, erroneously laid down in all the charts. The same may be observed of the coast of Cutch and the shores of that Gulf from the eastern (Khoré) branch

of the Indus to Bate, situated at the north-west angle of the Kattywar peninsula. While it is in contemplation shortly to survey the Gulf of Manaar, it is not probable that the unsurveyed portion of the western coast, the accurate examination of which is equally, if not more, important to navigation, will remain long neglected.

*Survey of the Chagos Archipelago.* The chain of the Maldives has been completely surveyed by Commander Moresby in the *Benares*, and that officer is now engaged in a similar survey of the Chagos Archipelago. This survey will embrace the *Speaker's bank*, and all the banks and shoals adjacent to this group. The surveyors will then proceed to the examination of the bank of *Saya de Malha*, situated about 5 degrees S. E. of the Seychelles, where they will continue operations as long as their supplies allow them. Before concluding operations for this season, Captain Moresby will probably add to his other surveys, that of the *Great and Little Basses*, lying off the south-east point of the coast of Ceylon.

*Of the South Coast of Arabia and Gulf of Aden.* On the south coast of Arabia, the *Palinurus*, Commander Haines, is employed in connecting the surveys of the Red Sea and Persian Gulf; besides surveying the African shore of the Gulf of Aden as far as Cape Guadafui. On the Arabian coast the operations of this party have extended from Bab-el-Mandeb to Cape Isolette, leaving still unfinished along this coast the space extending from the Cape just mentioned to Ras-el Had, together with the island of Maceira, which lies contiguous to this part of the coast.

The dangerous nature of this part of the coast, and the ferocious character of the Arabs who inhabit it and the neighbouring island, render the completion of this portion of the survey, in particular, of the greatest practical importance to navigation.

*Desiderata.* The following are a few desiderata on which the Society would solicit information from those who possess the opportunities of devoting a portion of their time and attention to the subjects. Statistics of the principal cities of the Deccan, Guzerat, &c.

Geographical description of the provinces of Kandeish, Myhe Caunta, Kattywar, and other less known districts and provinces within, or contiguous to, the territories of this presidency.

Description of the hill-ranges which occupy the Northern and Southern Concans between the Ghauts and the sea, to exhibit the arrangement or grouping, and the height of these hills; their structure, peculiarities, &c. also any information relating to the physical geography of these provinces.

Table of heights of the principal mountains of the Ghauts.

The geographical site and topography of the source of the river Nerbudda.

Description of the *Little Run*, lying between Guzerat and Kattywar.

Any facts relating to the strength, direction, or time, of currents of the ocean between the African and Western Indian coasts, in the Red Sea, and in the Persian Gulf.

Information on the Eastern Coast of Africa, between the entrance of the Red Sea and Cape Delgado, with reference to the commerce carried on between that coast and the ports of India, and between the coast and the interior. Accounts of any caravan routes which may exist between particular ports on the coast and places of importance inland. Information on the nature of the country situated towards the interior of the African continent, with descriptions of any remarkable natural features existing in these countries, such as lakes, rivers, mountains, or mountain ranges, &c.; also accounts of the nations which occupy the countries contiguous to the coast.

Valuable information on the above subjects may be obtained from intelligent Arabs who have resided on the east coast of Africa, from natives of India who trade with that part of the world, and from natives of the coast, who are met with in the ports of Arabia, particularly at Muscat and Mocha, and in the Indian ports of Mandavie, Bombay, &c. as well as on the coast itself, to the parts of which occasional visits are made by our ships.

All the recent information we have received respecting the Arabian coast lying between Oman and Yemen, points out the facility of penetrating into the inland provinces adjoining it, particularly Hadramaunt, Mabrâh, &c. It is to be hoped that some enterprising officer of those at present employed on this coast will take advantage of these facilities, and that, before the survey now carrying on is completed, we shall be able, through their exertions, to procure precise information regarding these countries, of which no recent geographical account exists.

The Arabian provinces situated along the coast of the Gulf of Persia still remain to be explored; and the maritime districts of the Persian provinces of Kerman, Lar, Fars, and Kuzistan, might be familiar to us, as intercourse between the inhabitants and the British, stationed in the Gulf, is frequent and opportunities often occur of traversing these districts in various directions, and thereby of removing obscurities which are met with in the most modern descriptions of these countries.

*Society's Finances.* With respect to the financial affairs of the Society, it will be seen that the sum of rupees 888 only have been actually received of the subscriptions due for the year just closed, leaving a balance of rupees 552 still to be recovered. Arrears to the amount of rupees 744 on account of subscriptions for former years still remain unpaid, and a large portion of this sum, in consequence of the departure or death of members, must be considered irrecoverable. It will be for the Society to consider whether, if the amount of the annual subscription were reduced, say to 15 instead of 24 Rupees, the annual amount of these arrears would be diminished.

*Resolved,* That, in compliance with the recommendation submitted in the concluding paragraph of the report now read, the annual subscription to this Society be reduced to rupees 15, to commence from the 1st instant; all arrears due for preceding years being payable according to the old rate of subscription.

*Papers Presented.* 1st. Observations on the Bore, or rushing tide, in the northern parts of the Gulf of Cambay, and the entrances of the Myhe and Sabarmutty Rivers. By Lieutenant R. Ethersey. (Presented by Government.)

2d. Notices of the Scyelles, the Amirantes, and other islands, situated between the Equator and 12°. S. Lat. &c. By Major Stirling.

3d. Description of the Island of Perim, situated in the Gulf of Cambay. By Lieut. R. Ethersey, I. N.

For these interesting papers the thanks of the Society were voted to the respective authors.

The following gentlemen were elected members of the Society :

Dr. A. Stuart, Major Stirling, J. Shaw, Esq. C. S. and Lieut. Ayrton.

The meeting adjourned.

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*Proceedings of the Bombay Geographical Society, 1837.*

August 3. Rear Admiral Sir C. Malcolm, President, in the chair. Lieutenant Ethersey, I. N. was elected a member of the Society.

*Read* the following letter from The Right Honorable Lord Auckland, addressed to Rear Admiral Sir Charles Malcolm, President of the Society.

Sir, .

I have to return you many thanks for your obliging communication of the second and third reports of the Bombay Geographical Society; and I have particularly read with interest the paper giving an account of the tribes inhabiting the shores and islands of the Gulf of Persia, and that which describes with more minuteness than I have been able to trace in other works, the difficult and too limited navigation of the Nerbudda river.

I shall have great pleasure in becoming a member of your Society, and will beg you at all times, and without reserve, to point out any mode in which I may best be able to promote its objects.

Very faithfully, &c. &c.

Calcutta, July 3d, 1837.

(Signed)

AUCKLAND.

Resolved, that the President be requested to communicate the letter now read to the Right Honorable Sir Robert Grant, Patron of the Society, and to solicit His Excellency to point out in what way he thinks that Lord Auckland's name can be most appropriately attached to the institution, as His Lordship has been pleased to express a wish to become a member.

*Read* the following letter from T. G. Taylor, Esq. Astronomer Madras Observatory, addressed to the Secretary.

Sir,

Having represented to Captain Moresby, of the Honorable Company's Surveying Ship *Benares*, that I was desirous of tracing from observations the lines of dip and magnetic intensity across the southern parts of the peninsula of India, but that I was unprovided with a dipping needle, Captain Moresby, conceiving that a series of observations of this nature would tend to forward the views of the Geographical Society, has transferred the loan of the dipping needle (which is the property of the Geographical Society) over to me, with the understanding, that I am to return it to you at Bombay in the month of January

next, when he expects to return after the completion of his survey. It has occurred to me; however, that on being made acquainted with the nature of the observations on which I am about to engage, your Society will extend the loan of the dipping needle in question to a period (not exceeding twelve months) during which it may be necessary to employ it for the purpose above specified. To explain the nature of my undertaking, I may state that I am now about to leave here to make observations of the dip and Magnetic intensity at every 20 or 25 miles along the coast from hence to point Calymere, or perhaps to Ramnad, from whence I have some hopes that the observations will be continued to Cape Comorin, and from thence up to Cochin by Mr. Caldecott. I shall probably go up to Nilhore after my return, and I have a correspondent at Hydrabad, one at Calcutta (Prinsep), one at Lucknow (Wilcox the Astronomer), and one at Delhi, from whose observations I hope to be able to trace out the lines of dip and intensity for India, in a manner similar to that lately executed for Ireland under the auspices of the British Association. Under these circumstances, will you be pleased to obtain for me the loan of the dipping needle which was supplied to Captain Moresby, till January 1839, if necessary, when it shall be returned to the Geographical Society at Bombay.

I have, &c. &c.

(Signed) T. G. TAYLOR, H. C. A.

Resolved, that Mr. Taylor's request be complied with, and that he be allowed to retain the instrument as long as he may require it for the observations in which he is now engaged.

*Read* a letter addressed to the Secretary from the Secretary of the Royal Geographical Society, dated 28th July 1836, accompanying part 2d, vol. 6th, of that Society's Journal.

Resolved, that application be made for permission to take copies of certain maps and charts belonging to Government, a list of which will be submitted to the Managing Committee by the Secretary previous to forwarding the application.

Proposed by Lieutenant Ayrton, seconded by the Secretary, and carried—that, as the amount of the annual subscription at present leviable, is inadequate to enable the Society to procure the indispensable requisite of a geographical library, a fund be formed by voluntary subscription to be applied solely to purchasing a library, and to procuring such periodical works as may be hereafter decided on; the library and periodicals to be confined to such works as have reference strictly to geography, and the sciences immediately connected with it.

A subscription list is accordingly opened for this purpose.

Resolved, that the magnetical apparatus, invented by Gauss, for determining the magnetic dip, intensity, and variation, be ordered from London, for the use of the Society.

**PAPERS PRESENTED.** *I. Account of the present state of the Trade between the Port of Mandavie in Cutch and the Eastern Coast of Africa.* By Lieutenant T. Postans. Communicated by the Secretary.

The Author confines his observations to the actual state of this trade, leaving the subject of its early history for future investigation. The paper commences with a short description of the Port of Mandavie, situated on the northern shore of the Gulf of Cutch, in lat.  $22^{\circ} 50' N.$  and in long.  $69^{\circ} 34' E.$  The town is built on a large creek which runs east of the city, directly inland, and, being influenced by the tide, admits of boats unloading close to the walls of the place. For the greater part of the year, the mouth of this creek is obstructed by sand-banks, which leave merely a narrow passage, by which boats of tolerable burden can enter only at high tides. These banks are yearly swept away by the freshes during the rains, the violence of which remedies an evil which might otherwise prove in a great measure destructive to the trade of the place. In the offing, at the distance of about a mile from the shore, there is good anchorage, where the larger sized boats and vessels generally lie.

Mandavie carries on a considerable trade, inland, with Palee and other places in Marwar, Scinde, Guzerat, Jaissalmeer, &c.; and, by sea, with all parts of western India and Malabar, the Red Sea, Persian Gulf, and east Coast of Africa, occasionally, as far as Mosambique. The revenues of Mandavie (land and sea duties) are farmed annually at about nine and a half lacs of cowries, or two and a half lacs of rupees.

On an average, ten boats leave Mandavie annually for the east Coast of Africa. The size of these varies; there are two boats belonging to this port, which amount each to 800 candies in burden. The crews are partly Musalmans, partly Hindoos, but principally the latter. The Author has observed instances wherein the whole crew of a boat was composed of Rajpoots, who are esteemed the best sailors, the Rajpoot *Mallims*, or pilots, of Cutch being justly celebrated for their skill and courage. The time for sailing commences in October, and the trade is open during the whole of the fair season. The greatest number of boats arrive from Zanzibar in the latter end of May; three or four Arab boats, of those which visit Mandavie annually, are taken up for the African trade, but the greater part is carried on in Cutch boats and by Cutch crews. Among the merchants of Mandavie, the arrival

of their "Suwallee" boats creates great excitement. An owner will liberally reward the messenger who brings the first intelligence of the arrival of his vessel: for this purpose the western bastion of the city wall is generally crowded, particularly about sun-set, with persons provided with telescopes. Some of these, by long practice, are enabled to distinguish at a great distance the various boats as they approach the port. Heavy bets are made by persons interested, as to the arrival of their boats.

The places on the coast visited by boats engaged in this trade are Burburra, Mugdasir (Mugdasho), Murka, Baráwur, Lámoon, Bombasir (Mombaze), and Zanzibar; sometimes, but rarely, Mosambique.

The three first ports are situated on that part of the coast generally denominated by the natives "Buradur," and the others on that called Suwallee. It is under the latter denomination that the whole of this trade is known in Cutch, and the fleet of boats which annually makes its appearance in May (as stated above) are called "Suwallee" boats.

All the trade of the "Buradur" coast is carried on by the Somaulis, who find their markets in the interior; they are described as fair dealers, but very merciless in case of shipwreck or misfortune. Hindoo brokers, principally from Surat, are the agents in all transactions between the traders and the Somaulis.

The ports on the Suwallee coast are frequented by Banians and Batiás, many of whom are from Mandavie, and remain here to superintend the business of their correspondents residing at that port. Of these agents, about fifty reside at Lámoon and Bombasir, and two hundred at Zanzibar.

The principal article of exchange is ivory, but it is a subject of general complaint, that, owing to the American and French vessels which resort to Lámoon and Zanzibar, and carry away large quantities of this article, Cutch traders find this commodity each year more and more scarce.

The various articles exported from Mandavie for the coast, as well as those received in return, are stated by the Author, and will be given when the paper is printed entire. Mandavie is principally indebted to its manufacture of "siah kupras" for the advantage with which it carries on this trade. This article meets with a ready sale, though, in the opinion of the Author, it is inferior to cloths of British manufacture. It is, however, better suited to the taste of the people of the coast. The weavers of the finer descriptions of these cloths are Sindians located at Mandavie.



The Author attempted to gain information from intelligent, *macquodas*, engaged in this trade, respecting the people inhabiting the part of the African Coast to which they resort, but the traders from Cutch are only slightly acquainted with them, as they do not understand their language, and negotiate all their transactions through the agency of brokers.

Two spirited sketches, by the Author, accompany this paper; one of a Rajpoot pilot, Verjee, who furnished the Author with most of his information on the subject of this trade; the other of a Seedee sailor from Zanzibar.

*II. Notice on Sulphur Mines of Cummeer\* in the Persian Gulf.*  
By Lieutenant G. Jenkins, I. N. Communicated by Rear-Admiral Sir Charles Malcolm.

The town or village of Cummeer is situated on the Persian coast, nearly opposite the centre of the island of Kishm, from which it is separated by the channel which bears the name of the island. It is distant about a mile from the sea beach, and is built near the foot of the hills which range in the direction of the coast. The town contains five hundred huts, and two thousand inhabitants. The huts are constructed of mud and date branches, and, in case of invasion, the inhabitants set fire to them, and retire with their families and property into the fort.

From this place the Author proceeded to visit the sulphur mines, situated about three miles to the south-west of the town. These mines are worked in a hill about eight hundred feet high, the entrance being situated about two hundred feet above the base of the hill. At the entrance there is a square space where the workmen, while employed in mining, reside. From this the first mine or gallery extends for five hundred feet. This gallery has a curved direction, following the contour of the hill, and descends at an inclination of twenty degrees. The sides are sloping, and about twenty or thirty feet apart. A narrow path, in many parts not more than six inches broad, leads along the gallery; above this path to the roof the height is estimated at one hundred feet, and below the same level to the floor there is a space of twenty feet, making the whole one hundred and twenty feet high. The second gallery descends more perpendicularly, but is not so high as the first. The third descends still more abruptly, and at the bottom, which forms the lowest level of the mines, the water collects to the depth of four feet. Lieutenant Jenkins supposes that from the entrance

\* Khamir.

following the direction of the pathway to the extreme end of the third gallery, the distance amounts to a thousand feet. The whole hill is stated to be composed of sulphur, differing in quality. The purest is obtained from the lowest or third gallery, but from the narrowness of the path, and the loose nature of the materials forming the roof and sides, which occasionally fall in, only a very small quantity can be procured from this part of the mine at one time.

The sulphur is sublimed in small kilns situated immediately without the entrance of the mine. A portion of the sulphur is set on fire and thrown to the bottom, the kiln is then filled with the impure materials, and the whole ignites. During the process sulphurous acid gas is produced, which occasions a suffocating sensation when inhaled. Throughout the whole mine a heavy sulphurous smell is perceived, which is most intense near the entrance, where it produces a great difficulty of respiration.

The Author was informed that the eye sight of the miners was much injured by working in the mines.

The mines were formerly worked for His Highness the Imaum of Muscat, but during the last year he has made them over to Sheik Saif bin Nabbon, Governor of Bunder Abbass, who now carries on the establishment on the following scale :

The Governor of Cummeer (who superintends the weighing of the sulphur and is responsible for it,) receives twenty dollars monthly.

Ten stewards receive each per mensem ten kooroonees.\*

One hundred and twenty miners receive each four kooroonees monthly.

Ten camel drivers (who convey the sulphur when ready for exportation, from the mines to the beach,) each four kooroonees.

Besides the above expenses, each miner receives a mamoodie † for every maun (nine pounds) of sulphur (purified) they collect, and a man they state, can clear ten mauns daily. The miners will not work more than four days in seven. They return every third day from the mine to the town where their families reside, for they consider that uninterrupted residence at the mine would be very unhealthy ; as it is, they complain that their employment shortens their lives.

The author was informed that the average cost per maun of the sulphur, after being conveyed to Cummeer and ready for embarkation,

\* The Persian rupee current in the Gulf.

† 100 mamoodies make a Persian toman, which is valued at 11s. 11d. to 12s. 7d.

was one quarter of a rupee, Bombay currency. The natives have a tradition, that in the reign of Nadir Shah these mines were worked under the superintendence of Europeans, who they suppose to have been English.

In 1830 the workmen fell in with an old shaft, before unknown to them, in which were found forty dead bodies in a sitting posture, with mining implements, of the same kind as the people now use, near them; the bodies fell to ashes as soon as they were touched. No tradition exists to account for the fate of these persons. During the last fifty years eight men are reported to have been killed, by the sides of the mine falling in.

Lieutenant Jenkins found the people of Cummeer very civil and communicative.

*III. Information on the Town of Burburra, situated on the east Coast of Africa.* By Lieutenant R. Ethersey, I. N. Communicated by the Secretary.

Burburra is a temporary town or village situated at the head of a small but secure harbour on the African coast, in latitude  $10^{\circ} 26' 50''$  North and about  $45^{\circ} 04'$  East longitude. Here an annual fair is held, at which the productions of various nations and countries, brought from the interior, are bartered for the commodities carried there by vessels from India and Arabia.

The bay, the Author states, affords excellent shelter from all the prevailing winds throughout the year. The country contiguous to the coast affords neither pasturage nor cultivation, the soil consisting of a coarse sand or gravel; it rises by a gradual ascent towards the interior for about ten miles, where it is traversed by the first range of mountains, which are of moderate height. This is succeeded by a second range, which is much higher and very distant. The country lying between the two mountain ranges is described by the natives as very fertile and beautiful, being watered by small rivers or mountain streams; but these are intercepted by the first range of hills, at least few or none continue their course to the sea. This valley furnishes for export ghee, coffee, gums, gold dust, ivory, rhinoceros' horns, and sheep. The tribes which frequent the fair at Burburra come from the north-west, and west-north-west, in the direction of Hurrur, which they speak of as a large town, in which a great chief resides; and they describe the houses as large, built, not with sticks and mats, but, as far as the Author could understand, of mud. This town is twenty days (camel's) journey from Burburra, in a north-westerly direction.

Burburra consists of an assemblage of rude huts of various forms round, oval, and square, generally about 6 to 7 feet in height, built of sticks covered with mats or skins. They possess in general little of the appearance of human habitations, but a few are of larger size and divided into apartments. In the latter reside the Banians, the Nacquodas, and several Chiefs, who remain at Burburra throughout the season. These huts are erected in November, or as soon as the first caravan arrives, and are dismantled on the breaking up of the fair, in the month of May, when the greater part of the materials are taken away; for scarcely a soul remains on this part of the coast during the north-east monsoon, owing to the suffocating hot winds, which in June, July, and part of August, blow with great violence.

During some seasons as many as six or seven different tribes visit Burburra, at others two or three; they are constantly arriving and departing. Each caravan carries materials for huts, and it is surprising, the Author remarks, with what celerity these are erected and struck. Lieutenant Ethersey on one occasion saw a very large caravan arrive, consisting of a thousand camels, and at least two thousand souls, and in little less than four hours all their huts were erected.

The Somaulis, the race that are met with at Burburra in greatest number, are described by the Author. In their person they are tall, long limbed and slender, of a dark copper complexion, with small regular features. Their hair, of which they are excessively vain, is black and curly. In disposition they are warlike, and endure fatigue and pain with great patience. They are also very abstemious. Their arms consist of a spear, a small shield made of rhinoceros' hide, and a short, broad bladed dagger, which fits into a leather scabbard and is buckled around the waist. In religion they are Musulmans, but not very zealous.

The trading season commences about the latter end of October, or beginning of November, when the first caravans from the interior arrive on the coast, bringing with them materials for constructing the huts, and immense droves of sheep, which are immediately embarked for the Mocha market before they have time to fall off in flesh, as there is no pasturage for them about Burburra. These sheep form a very important article of export from this coast to Mocha, and several ports of the south coast of Arabia. They are covered with hair, the head is of a shining black, and the neck and body of a pure white color. The tail of this breed is loaded with fat, but the general form of the body and limbs is graceful, and the meat is esteemed of excellent flavor.

After the beginning of November caravans arrive daily, as do native vessels from all parts. The former bring the following articles: ghee, coffee, sheep, myrrh, benzoin, gum Arabic, elephants' teeth, gold dust, slaves, ostrich feathers, and dry hides; the latter, which arrive from Bassorah, Muscat, Klutch, Bombay, Mangalore, Maculla, Aden, Mocha, Juddah, &c. import white and blue cotton cloths, sugar, rice, iron, zinc, dates, trinkets, &c.

The Author observes that the African tribes frequenting Burburra are now much better acquainted with the European character than they were formerly, and that no vessel going there for the purpose of trade, need fear the disastrous fate of the *Brig Marianne*, which was cut off in 1825 by the Somaulis, at the instigation, the Author believes, of the Banians, whose policy it was to prevent European vessels from participating in this trade.

The Somaulis are by no means so savage or treacherous a race as they have been represented; on the contrary, the Author would place entire confidence in their good faith and generosity; and states, that he would without hesitation accompany any tribe into the interior, and consider himself perfectly secure as long as he remained with the tribe that would offer to protect him.

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November 2. James Bird, Esq. in the chair.

J. Erskine, Esq; Dr. Graham, Kattywar; Dr. R. Brown; Captain Ouseley, Hosungabad; Captain Stuart, 14th Regt.; C. F. Collier, Esq. were elected members.

DONATIONS TO THE LIBRARY. Rumphii Herbarium Amboinense, 7 vols. and Desmarest Mammalogie, presented by Dr. C. Lush.

The following correspondence was then laid before the meeting.

To Rear Admiral Sir Charles Malcolm, &c. &c.

Sir,

I have had the pleasure of receiving your communication on the part of the Geographical Society, inclosing a letter to the Society from the Governor General of India, and requesting me to point out in what manner the name of Lord Auckland can, in my opinion, be most appropriately attached to the institution.

I beg to state in reply, that the best manner in which we can manifest our sense of the honor which Lord Auckland has conferred on the Society by his proffered support, will, as I conceive, be to elect him its honorary patron.

The effect will be to place his Lordship at the head of the list of members; and I trust I need not add that it will highly gratify me to

see him in that situation, and to co-operate with him, to the best of my ability, in promoting the objects to which the Society's labors are so usefully directed.

I remain, Sir, yours very faithfully,  
Dapooree, 18th Aug. 1837. (Signed) ROBERT GRANT.

To The Right Honorable Lord Auckland, &c. &c. &c.  
My Lord,

I am requested by the members of the Bombay Geographical Society to solicit your Lordship's acceptance of the office of Honorary Patron of the Society.

I am at the same time desired to offer the respectful thanks of the members for the interest which your Lordship has been pleased to take in the success of the institution; and we hope, by continued exertion in collecting and publishing useful information, to merit your Lordship's support and patronage.

I have the honor to remain,  
Your Lordship's most faithful and obedient servant,  
Bombay, 2d Sept. 1837. (Signed) CHARLES MALCOLM.

To Rear-Admiral Sir Charles Malcolm, &c. &c. &c.  
My Dear Sir,

I have to acknowledge your letter of the 2d instant, and to assure you of the good will and the gratification with which I accept the office of Honorary Patron of the Geographical Society of Bombay.

I am, very faithfully, &c. &c.  
Calcutta, Sept. 22d. 1837. (signed) AUCKLAND.

PAPERS PRESENTED. *In Journal of an Excursion to Sanaa, the Capital of Yemen.* By Mr. C. Cruttenden, I. N. Communicated by Government.

The Author, who was employed in the H. C. Surveying Brig *Palinurus*, under Captain Haines, on the survey of the south coast of Arabia, whilst his vessel was lying at Mocha, obtained permission to proceed to Sanaa, with the ulterior object of visiting the remains of *Mareb*. Mr. Cruttenden intended to travel by the southern route, but, in consequence of the disputes between two of the tribes, that road was impassable; he was therefore obliged to take that by Zebid and Beit-el-Fakih.

The stages which occur on this route, between Mocha and the capital, are Rouez a small village, distant fourteen miles; Mobshej, a tolerably large town, having a population of 800 souls; Shurjah (28

miles) a small village, nearly deserted, owing to the scarcity of water and fodder; Zebid, between which and the preceding stage the country assumes a less barren appearance; Beit-el-Fakih, a large straggling town without walls, but possessing a few good houses built of stone. This place was garrisoned by three hundred Egyptian troops at the time of the Author's visit. At a short distance from the last stage the moun'tains commence. Ascending the first ridge by a gorge, the Author entered the valley of Senneef, in which the village of the same name is situated.

After leaving Senneef, the next stage is Hajjeer, a frontier fortress of the Imaum's, situated on the ridge of a lofty mountain range; then Somfoor, around which the country is very mountainous, and abounds in coffee and various kinds of fruits. Dora forms the next halting-place, from which the road winds by a difficult pass, which in many places is built up in steps, and opens in the valley of Seyhan, which is well watered, and produces luxuriant crops of barley, Indian-corn, juwari, &c. Mofakh, a small village built on the summit of a small conical hill, is one of the market towns, fairs or markets being held every day of the week at particular towns throughout the Imaum's dominions. Leaving Mofakh, and crossing over a very hilly country, the Author next halted at El Houthein; then, passing the small hamlet of Komiss, he rested at Muttnah, which is the last stage from Sanaa. The Author entered the city by the suburb of Bir-el-Asab, where he was met by the British agent, and conducted to a dwelling prepared for him and his companion Mr. Hulton.

During his residence at Sanaa, the Author, though in other respects very kindly treated, was placed under great restraint, and for some time was closely confined to his house. His opportunities of observation were in consequence very limited. He had several interviews with the Imaum, Ali Munsoor, who is a young man about 24 years of age, descended of an Abyssinian mother. On one occasion, when the Author was permitted to walk about the city, he met with several inscriptions on the walls of some houses, in the same character as those found at Hussone Ghorab. Of these copies were taken, and transmitted with his paper. He was told that similar stones were brought from the ancient city of Mareb, situated N. E. of Sanaa, seven days' journey. The territory around that place is called by the inhabitants of Sanaa "Urd-é-Saba," and the Author was assured that after the rains, square pieces of gold coin and many inscriptions cut in marble, are frequently found; statues and broken columns are also numerous. As the Author was preparing to visit these interesting

ruins, his companion, Mr. Hulton, was seized with dysentery, which obliged them to leave Sanaa for the coast.

Comparing the present state of Sanaa with the accounts of former travellers, the Author does not think that the population has diminished, as is the case with Aden and other cities on the coast, that were once so flourishing. Several Banians inhabit Sanaa, one of whom is considered the Chief, and pays an annual tribute of 100 dollars to the Imaum, and 30 dollars to the support of the mosque. On the death of a person of this class, one half of his property goes to the Imaum, and the other to his heirs.

The Jews form another important branch of the population. In Niebuhr's time, the town they resided in was separated from the city, but it is now included within the walls of the Bir-el-Asab. The Jews are the only artisans in the place; their number, the Author conjectures, may amount to four thousand.

Coffee will not grow in the immediate vicinity of Sanaa, although the experiment has been frequently tried. The plantations which the Author observed on the route from Mocha, are principally situated about Somfoor and Dora. Here the plant is usually found growing on the sides of the valleys or other sheltered situations, in soil which has been washed down from the adjacent heights. This soil is produced by the decomposition of a species of clay-stone, found only in the more elevated districts, the detritus of which finds its way down the sides of the valleys, where it is carefully collected and protected from being carried away, by means of stone walls which present the appearance of terraces. The plant grows best in a moist soil, but does not require much rain. In December and January the produce of the various districts is transported to Sanaa, and thence to the sea-ports: the coffee is generally sorted into seven different classes, which have reference to the size, quality, &c., of the bean.

The few observations which occur in this paper on the geology of the country were compiled by the Author from the notes of his late friend and companion Mr. Hulton, who, shortly after his return to the coast, unfortunately fell a victim to the disease with which he was attacked at Sanaa. After crossing the sandy plain of Tehama, trap of several varieties presents itself, particularly in the vicinity of Senneef, where it forms hills of moderate height. This formation extends to Somfoor, at which place the granitic rocks appear, presenting mountains of great height, with summits of remarkably varied shapes, from the sides of which huge masses of rock have been rolled into the vallies, where the road is often obstructed by them. From



El Houthein the clay-stone predominates, and from this bed it would appear that the chief part of the soil deposited in the valleys is washed down. After surmounting the lofty hills beyond Komiss, the country becomes less mountainous, and the rocks appear to be of a volcanic nature, large masses of cellular trap and scorïæ lying scattered upon the plain.

On the subject of the climate of this part of Yemen, the Author states that in ordinary years rain falls at Sanaa three times ; first, in the latter end of January, but in small quantities, and frequently not at all ; secondly, in the beginning of June, when it falls for eight or ten days. At this time the seed is sown, and the cultivator looks forward to this season with great anxiety. But the heaviest rain falls in the latter end of July. A few farmers delay sowing till this period.

In the month of July the northeast wind prevails during the day, but declines in force towards the afternoon, when it is succeeded by a current of air from the northwest, which is generally accompanied by lightning, thunder, and rain.

At the period of the Author's visit, the inhabitants were suffering severely from famine, caused by the want of rain for the preceding four years. The famine, as usual, was accompanied by disease, and at the time the author arrived at Sanaa, nearly two hundred funerals passed the gate daily.

The country to the south of Sanaa, as far as Aden, formerly belonged to the Imaum of Sanaa, but the inhabitants now set him at open defiance, and it was the intention of Ali Munsoor to collect an army to chastise them, when all his plans were arrested by the appearance of the Turkish force. Two very powerful tribes, the Do Mahomed and Do Hussein, would be able to check the progress of the Egyptian army, were they on terms with the Imaum, but it appears that a debt of 150,000 dollars had caused a rupture between the former prince and these tribes, and the late conduct of the reigning Imaum, in endeavouring to seize his uncle, has widened the breach. Owing to some fancied conspiracy, the Imaum sent orders to seize the person of his maternal uncle, Seedeç Gassim, and confined him in a state-prison. He, however, escaped and took refuge in Taes with the Do Hussein. Here he assumed the name of El-Hadi, and, as the people of Yemen have a legend that El Hadi is the name of the reviver of their religion, they flocked to his standard in great numbers. He sent to the Imaum during the Author's stay at Sanaa, and demanded of him to resign "the seal of the Imaum," but not thinking himself strong enough to attack Sanaa, he was making

overtures to the Turkish governor at Mocha at the time the Author sailed from that place, in September 1836.

*II. Medical Memoir on the Plain of the Indus.* By P. B. Lord, M. D. in Medical Charge of Captain Burnes' Mission. Communicated by Government.

This paper has already been presented by the Supreme Government to the Medical and Physical Society of Calcutta, and it will doubtless shortly be published in the Transactions of that Society.

*III. Commercial Information regarding Bhawal-Khan's Country.* By Lieutenant R. Leech, Bombay Engineers. Communicated by Government.

The Author left Bombay with Captain Burnes on the mission to Cabul. The country to which Lieutenant Leech's information refers, is called *Ubho*, in contradistinction to *Lamma* or *Sindh*. Its boundaries are Subzil Kot, the river, Bhattneer, and Morot; the two principal towns are Ahmedpoor and Bhawalpoor.

Ahmedpoor has a population of 10,000. To supply the various wants of this population there are established in the town of Ahmedpoor, three houses of bankers, ten money changers, thirty haberdashers, four government granaries, forty goldsmiths' shops, three gunsmiths, twenty iron-smiths, fifteen pastry cooks, twenty eating-houses, eighteen indigo dyers, eight dyers of Kosumba (safflower), thirty-three mutton butchers, seventeen beef butchers, eighty-six grocers, and one hundred and ninety-five weavers of plain cloth.

Bhawalpoor contains about eighteen thousand inhabitants, and yields a revenue of 1,25,000 rupees. The author gives very minute and useful information on a variety of subjects connected with the trade of these towns, embracing the following heads:—productions, exports and imports to and from the various places with which commercial intercourse is maintained, the commercial routes, currency, exchange, insurance, weights and measures, rate of camel-hire, &c. &c. On these subjects the minute information given is not susceptible of analysis.

*IV. Report of the Strata passed through in the Bore at Gogo.* By Lieutenant G. Fuljames. Communicated by Government.

This paper has been published in a recent number of the Journal of the Asiatic Society.

*V. On the Ruins at Tahrîe.* By Lieutenant Kempthorne, I. N.  
Communicated by the Author.

The town of Tahrîe is situated in the Persian Gulf and on the Persian Coast, in a deep bay formed by Cape Nabon to the southeast, and Cape Berdestan to the westward, about ten miles below the large and populous town of Congoon, and nearly under a remarkable hill called Jibal Serai or Barnhill.

Here the Author was obliged to take shelter from a north-wester, which he encountered while on a voyage from Bassadore to Bushire; and having ascertained that extensive ruins and sculptures were to be seen in the vicinity, he proceeded in search of them.

He discovered the ruins about two miles westward of the modern town, close to the sea, where the ground to some distance was covered with shapeless heaps of broken walls, foundations of buildings, and large hewn blocks of sandstone. Among these no perfect edifice remains, but all seem clearly to indicate that a large town or city once existed here. These ruins extend from east to west about two miles, and from north to south one mile.

On the summit of a hill stands the remains of some large edifice, apparently of more recent date; the roof has fallen in, but the walls are still standing, and in a good state of preservation. The entrance is on the north side, through a pointed arched gateway, which opens into an extensive apartment. On the left hand side of this entrance is a flight of several steps leading to a subterraneous passage which opens into a vault, excavated in the solid rock. This the Author conjectures was intended to be a reservoir for water, but he adds, that it may be the place alluded to in Morier's Travels, as a stable large enough to contain one hundred horses. The Author did not explore this vault, in consequence of the very loathsome smell that issued from it, and the myriads of bats with which the place was tenanted. A very deep well, also noticed by Mr. Morier, was examined by the author. Huge sepulchral stones were observed lying about in various parts; these were hollow, of an oblong shape, and rather smaller than a common sized coffin. The stones were all much dilapidated, but each bore a Kufic inscription, deeply cut and very legible, with various devices neatly carved on the ends and sides. From the fact of these inscriptions being in the Kufic character, the author is of opinion that the stones must have been fashioned into their present form at least eight hundred years ago.

The author also observed numerous shafts situated at equal dis-

tances from each other. His curiosity induced him to descend one of these, which he found to be fifteen feet deep by four wide, and at the bottom was a narrow passage running nearly north and south, just wide enough to enable him to crawl along it. He could trace this channel to a considerable distance, and from its construction, the Author supposes it to have been an aqueduct, which probably supplied the town with water brought from the neighbouring mountains. On the opposite cliffs to the westward, about a quarter of a mile distant, the Author noticed numerous excavations, which were apparently inaccessible, as the sides of the cliff were almost perpendicular, and he could discern no pathway leading to them. The Author from the distance could not judge of their dimensions, nor could he discover the nature of these extraordinary works, whether they were intended for human habitations, or for catacombs. His limited time would not permit him to explore them, but he adds that their appearance reminded him of the descriptions given by Captains Irby and Mangles of the excavations at Petra.

The Author concludes by stating his opinion, that the ruins, which form the subject of his observations are those of Siraf. This opinion he advances with diffidence, as it differs from that of Mr. Buckingham, who, following D'Anville and Dr. Vincent, supposes the ruins of Siraf to be situated opposite the island of Kenn or Keish, and nearly at the foot of Charak hill. In corroboration of his view, the Author states that no extensive ruins exist in the situation which Mr. Buckingham would fix as the site of Siraf; and he conjectures that that author, not having personally visited the locality in question, must have depended on information received from the natives, which is seldom precise or correct.

*VI. Notes taken during a Journey in Oman, and along the east Coast of Arabia.* By Lieutenant F. Whitelock, I. N.

In November 1835, Lieutenant Whitelock obtained the sanction of Government to travel in the interior of Arabia and Persia, in order to make himself proficient in the languages of these countries, and arrived at Muscat in the beginning of the following month (December 1835). Having laid down no fixed plan, he determined in the first place to proceed to Samed, a town situated inland south of Muscat, where he was informed Lieutenant Wellsted was residing. He left Muscat on the 13th, and on the 16th of December arrived at Samed.

On the 19th December, in company with Lieutenant Wellsted, he started for Nezwah, and arrived there on the 22d. Here they remain-

ed a few days, and then proceeded to the Green Mountains, a description of which is given in this communication. They spent a few days among the mountains, and met with great kindness and hospitality from the people; they then returned to Nezáwah by a different route. At the latter place they received information from Muscat, that H. H. the Imaun had engaged with a Shaik to conduct them from Braimee to Deryeh for 500 dollars, for which sum he agreed to supply camels, guards, water, &c. In consequence of this information, they considered it necessary that one of them should proceed to Muscat to close the bargain with the Shaik, and to procure the money required. Lieutenant Whitelock volunteered to undertake the journey, on which he started on the 1st of January, and arrived at Muscat on the 4th. He found great difficulty in obtaining the money from the agent and was in consequence obliged to remain longer in Muscat than he should have done, for the place was very unhealthy at the time. Here the Author was attacked with fever, and finding that he was not likely to recover at Muscat, he left it, though in a very weakly state, and reached Nezáwah, by easy stages, on 20th January. He found Lieutenant Wellsted seriously ill, and all the servants laid up with fever, and unable to move or render them the slightest assistance. Under these circumstances, they were, much to their annoyance, forced to abandon for a time their projected journey, for which every arrangement had been made with the Shaik of Lasha.

In order to re-establish their health, they determined to proceed to the sea coast, and accordingly started for Sib, situated a few miles from Muscat, and considered a very healthy place.

Having remained here a month, and finding their health greatly improved they determined to attempt the journey to Braimee, and thence to proceed on to Deryeh, if possible. They procured the necessary letters from the Imaun, who provided a Shaik to escort them. The Author and his companion started on the 25th February, and proceeded along the coast as far as Suick, then changed their direction towards the interior, and arrived at Abree on the 12th of March. At Abree they were treated most unceremoniously by the Shaik, who requested them to leave the town as expeditiously as possible, for he could not protect them, nor give them a guide or guards to escort them to Braimee, as he was afraid of the Wahabis. They afterwards learned that the Wahabis were actually in the town at the very time.

Finding it impossible to get to Braimee by this route, the travellers returned to Suick on the coast, and were most hospitably entertained by the Shaik. After remaining several days at this place, they deter-

mined to try if they could get to Braimec from Schinas, where they arrived on the 25th March in a boat from Suick. Here they waited several days for permission from the Wahibi Chiefs, but finding that a longer stay was necessary before they could expect to obtain it, they resolved to make the most of their time, and to proceed in a boat to Cape Mussendom, in order to visit Coomza. As they were on the point of starting on this expedition, they received intelligence that the Imaum was very anxious to see them, and had despatched messengers in quest of them. They therefore returned to Muscat, where, on their arrival, they found that the report which had induced them to visit the place was false.

Mr. Wellsted, finding his health still bad, and that there was little prospect of being able to proceed to Deryeh, determined to return to Bombay, for which place he started in April 1836.

The Author again set out from Muscat for Rostack, a town which he had not visited before. Here he was very civilly treated, but finding that he could not prevail on the Shaik to allow him to proceed through his territories to Braimec, he left Rostack for the coast; and on the 18th April reached a place called Messna, where he remained only one day, and then proceeded to Sohar, and thence to Schinas, at which place he arrived on the following day.

At Schinas the Author had an interview with the son of the Wahabi Chief, who was passing on his way to Muscat; he attempted to obtain a pass from him, but without success. On the following day, the Author hired camels, and set out from Sharga across the desert. From Sharga he visited Cossáb, then Bahrein, and Grane or Quoit. At the latter place he attempted to procure a boat to take him to the Tábor Endian river, which it was his object to visit, but not finding a boat here, he proceeded to Bussorah, where he was more successful.

The Author gives the following sketch of the general features of the part of Oman which he traversed in his various journies through that province.

‘The range, of which the part we visited is styled the Green Mountains, appears to continue as far as Cape Mussendom, gradually decreasing its distance from the coast as it approaches the Cape, so that from Burka the range is distant 40 miles, from Schinas 15, from Khorefa Khan 10, and about a quarter of a mile from the beach at Cape Mussendom. The chain at the Green Mountains is composed of three parallel ranges, of which the central one is the highest. Here the hills are not detached, but connected together by gorges of considerable elevation, whereas in the part of the chain

towards Cape Mussendom the hills are detached, though they follow the same general direction. The country between the sea and the mountains presents, immediately adjoining the coast, a belt of date groves as far as Khore Kulba, occupying a breadth of about four miles, beyond which the plain, at every point at which I crossed, is barren up to the foot of the principal range, but has detached hills scattered irregularly over it. Beyond the mountains to the south, we have sandy desert, which separates Oman from the province of Lasha and Nejid, the boundary of Oman in this direction being a line which runs directly from Ras-el-Had to Abothubi. The coast between Abothubi and Cape Mussendom is denominated by the natives generally the "Oman Coast" that which extends from the Cape just mentioned to Ras-el-Had, is called in the same manner the 'Bannah Coast.'

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*VII. Statistical Account of the Town of Anjar in the Province of Cutch.* By Lieutenant T. Postans, 15th Reg. N. I.

The present communication is the first of a series of essays on the statistics of the principal towns in Cutch, which it is the intention of the Author to present to the Society, if his time and opportunities allow him to prosecute the necessary inquiries. The town of Anjar, the Author states, ranks third in the province in point of size, population, and trade. It is distant 24 miles south-east from Bhooj in that division of the province called Kanta, or the coast. Its shortest distance from the sea is seven miles, but its seaport, Joonia, is ten miles from the town. Anjar is a busy and important place, its locality giving it advantages which the capital of the province does not possess. It was taken by the British in 1816, and retained till 1821, when it was ceded to the Cutch government.

The town is walled, the walls enclosing a space of 2,900 yards in circumference. These and the fortifications of the town still in many places exhibit the devastating effect of the earthquake which occurred in Cutch in 1819, of which an account is given by Captain McMurdo, who was on the spot. As a record of that event, there is an inscription in Guzeratee on a small stone slab, let into the wall at each of the five gates of the town, of which the following is a translation.

“ Sree, after worship to Guneesa, to Ashapúra, Hirjeepál, Mahadeo Rao, in the year of Vere 1875, in the month Jet, on the 9th of the dark half of the moon, on Wednesday, an earthquake happened, which destroyed the Fort of Anjar; but during the minority of the

illustrious Rao Daisuljee, the regency ordered the re-erection of the walls, and in the month of Asar 1882 Vere (or Sahur 1747) on the 9th of the month, being Thursday, the work was commenced, the subjects were rendered happy; and the city flourishing. At that period Ambaram Rajaram was Kamdar, and superintended the work; the head maistry being Jugmal Petumber."

By a recent census, Anjar contains 2,434 houses, and the population consists of :

	No. of Houses.	No. of People.
Hindus.....	1980	8370
Musulmans, &c.....	363	1536
Sepoys.....	91	350
<b>Total</b>	<b>2434</b>	<b>10,226</b>

The Hindu population is composed of the following classes :

	No. of Classes.	No. of Houses.	No. of People.
Bramins.....	12	433	1386
Jain Priests.....	1	7	7
Bhats.....	1	6	25
Banians.....	7	853	4050
Workers in Metals.....	1	40	161
Cultivators.....	2	230	1000
Metahs.....	1	8	30
Artisans, &c.....	12	222	864
Servants of the Rao.....	2	8	35
Mendicants.....	3	20	134
Outcasts.....	1	153	678
<b>Total.</b>	<b>43</b>	<b>1980</b>	<b>8370</b>

From the above, the Author states, it will be seen that the population of Anjar, in round numbers, may be about 10,260 answering to the generally received average of  $4\frac{1}{2}$  persons to each house. The Hindus bear a proportion to the other inhabitants of 4 to 1, roughly.

The Author then gives a statement of the public buildings; also of the revenue and trade, which produce an annual amount of three lacs of cowries, or 79,000 rupees.

Two hundred boats are employed in the trade of this place, which bring imports principally from Malabar, Bombay, and Muscat. The



exports consist entirely of cotton, the produce of the Kanta, where the plain is more generally cultivated than in any other part of Cutch. The quality of the cotton grown in this province is much inferior to that of Broach or Surat, and on that account has no sale for the British market, but it is shipped in large quantity for the Red Sea and east coast of Africa.

The country immediately surrounding Anjar, possesses a richer soil than is generally met with throughout Cutch ; and the downs to the south-west of the town offer good pasturage to numerous flocks of sheep, the export of which to the Deccan has considerably increased of late. The market displays a larger variety of fruit and vegetables that can be seen elsewhere.

The rock on which Anjar stands is basaltic, assuming a distinct columnar appearance. The same formation extends to a distance of some miles south and west of the town. The trap in other parts of Cutch may be observed assuming the columnar form, but nowhere, the Author states, is this appearance so distinct and interesting as at Anjar and its vicinity.

*Proceedings of the Bombay Geographical Society, 1838.*

February, 23. Rear Admiral Sir C. Malcolm, President, in the chair.

P. Ewart, Esq; Dr. James Burnes; Lieutenant Wingate, and John Skinner, Esq; were elected members.

*Read a letter* from Mr. Wathen, Chief Secretary, conveying the permission of Government, to take copies of the following maps and chart for the use of the Society :

1. Map of Salsette. By Captain Tate.
2. Plan of Bombay.
3. Map of the Bombay Presidency. By Captain Jopp.
4. " of the Southern Concan. By Captain Jervis.
5. " of Kutch, compiled by Captain Jopp, from the surveys made by Captains Remon, Slight, Peat, &c. combined with the labors of Captain Burnes.
6. Chart of Bombay Harbour. By Captain Cogan.

*Letters* from Major Ouseley acknowledging his election, and expressing his willingness to communicate any information he may possess, on subjects connected with the Society's objects; and from Dr. Collier to the same purport.

*A letter* from Mr. Smyth, H. C. Brig Palinurus to Sir C. Malcolm, placing at his disposal a paper containing, "A few notes on the Coast of Arabia, between the Bay of Curia Muria and Morebat," and promising to forward a diary kept on an excursion into the country subject to the Bedouins of Morebat.

The town of Djezzar is mentioned; it is said to be situated about six days journey to the North west of Morebat, and Mr. S. points out the facility with which that place might be visited; for, in December 1836, while residing at Morebat, he met with a party of Mahara Bedouins, belonging to El Djezzar, from the chief of whom he received a pressing invitation to accompany them to their country. The object to be gained by visiting El Djezzar, the Author states to be "the opportunities which would doubtless offer of making researches into that part of Hadramant, and into Nedjed, as it appears that the natives have frequent intercourse with Deriah and Haryk."

*Colonel Dickinson* read a letter from Dr. Arbuckle, giving an interesting description of Aden, in reference, chiefly, to the facilities which that place affords for the site of a coal-depôt.

"The promontory which gives birth to Aden, is connected to the mainland by a narrow neck of low sandy ground, which not only forms the medium of communication with the interior, but also forms the head of two beautiful bays, distinguished as the *eastern* and *western*. \* \* \* The latter, which is often called *Back bay*, is by far the largest, and affords the greatest security to shipping during all winds and weather. It is in this bay, that the spot has been fixed by Captain Haines, for forming a coal depôt for the supply of our Steamers. We have narrowly examined this place; it is not only completely sheltered from every wind, but possesses at low water a depth of nearly twenty feet, within about thirty yards from the shore.

Dr. A. gives a minute description of the scenery in the environs of the town, which is well known to be very romantic. He notices the great number of wells and tanks, which must afford an abundant supply of water. He observes that the present population of Aden is reduced to a very miserable condition, and amounts to no more than six hundred, composed of Arabs, Somaulis, Banians and Jews. The Author then speculates on the favorable effect likely to be produced on its commerce, if a friendly connection be established by the British with this port.

"It happens that the road leading from Aden to the interior, is the nearest and most direct to the richest part of Yemen, where the population is most numerous, and from which, curious to say, the best coffee can be more easily conveyed to Aden than to the very port which has given birth to the name of Mocha coffee." \* \* \* The local situation and secure harbour of Aden, "give her a decided advantage over the ports of the Red Sea, in enabling vessels to perform several trips to and from India during the year, whereas the nature of the winds which prevail within the straits of Babel Mandeb, is such, that more than one can seldom if ever be effected by a native vessel."

With respect to the climate, Dr. A. writes, that from the observations he has made,

"Aden may be considered a healthy place, and so much is it esteemed as such by the inhabitants of the interior, that upon all attacks of fever, a visit to this town is recommended as the happy cure. The the summer heat, however, during the summer months, though not nearly so oppressive as that of Mocha, will still be as high as 90° and

that temperature will lead us to expect to meet with cases of bilious and remittent fevers, especially among Europeans."

*Two letters* from Lieutenant T. G. Carless, I. N. at present engaged in surveying the ports on the coast of Mekran, &c. addressed to the President, of which the following are extracts;

First dated,

" Kurachee Harbour, December 30, 1837.

" After the survey [of Kurachee harbour] was completed, I went out to the hot springs, which are situated about eight miles to the northward of the town, amongst the mountains. Two of them are so warm that you can only just bear your hand in them, and the water is quite pure and fresh. Of the others, two are cold, and another very salt.

In the centre of the plain, there is a small but very ancient tomb, near which I witnessed a most singular scene. On emerging from a dense mass of trees through which the road lay, we came suddenly upon a small swamp surrounded by groves, and formed by the superfluous waters of the spring close by, flowing into a low hollow in the ground. It was not a single sheet of water, but was full of small islets, so much so, that it appeared as if an immense number of narrow channels had been cut across each other in every direction. These channels were literally swarming with large alligators, and the islets and banks were thickly covered with them also. The swamp was not more than 150 yards long by about 80 broad, and in this confined space, I counted above 200 large ones, from 8 to 15 feet long; those of a small size were innumerable. The appearance of the place altogether, with its green slimy stagnant waters, and these huge bloated shapeless monsters moving sluggishly about, was, as you may imagine, disgusting in the extreme. The priests belonging to the tomb, told me it was curious to see them fed, and I of course had a goat killed for their entertainment. The moment the blood began to flow, the water became perfectly alive with the brutes, all hastening from different parts of the swamp to the spot. In the course of two minutes, and long before the goat was cut up, upwards of 150 had collected in a mass on the dry bank, waiting with distended jaws until their anticipated feast was ready. We stood within three yards of them, and, if one more daring than the rest showed any desire to approach nearer, he was beat back by the children with sticks. Indeed, they were so sluggish, and, if I may use the expression, tame, that I laid hold of one about 12 feet long by his tail, which protruded to a safe distance beyond the mass.

When the meat was thrown amongst them it was the signal for a

general battle ; several seized hold of a piece at the same time, and bit and struggled, and rolled over each other until almost exhausted with the desperate efforts they made to carry it off. It was curious to stand by and see such a mass of these unwieldy monsters almost at your feet, fighting and tearing each other for their food, and there are few things I shall remember so long as this alligators' feast. They are held sacred by the natives who number them at 1000. When the small ones are taken into account, the amount is by no means exaggerated, for every rivulet a foot broad and a few inches deep teems with them."

Second dated,

"Sonmeanee Bay, January 30, 1837.

"We had a very pleasant journey to Beylah ; \* the weather was delightful, the thermometer for several mornings not being higher than 35°. The country is a perfect level, and in most places overrun with bushes, but here and there, we passed through extensive tracts of tamarisk jungle, and saw many large patches of cultivation. On reaching Lyaree, about 15 miles from the coast, I was surprised to find we had, without knowing it, crossed the bed of the Poorally. In the dry season its waters are retained for agricultural purposes, by a *bund* thrown across it, 4 miles above that town, and from this place to its mouth, which only runs 5 miles into the land, it has *no bed*. In the rainy season the water escapes through a flat plain covered with jungle, about 12 miles long and 4 broad, which it inundates to a depth of one and two feet. It also finds another outlet in the same manner, through a number of shallow lakes on the eastern side of the great valley. We crossed the river two or three times during the journey, and at these spots the bed was from 500 yards to a mile in breadth, with banks 20 feet high, a stream of water 20 yards wide and a foot and a half deep, was running through it."

"At our audience, the Jam's court presented rather a brilliant scene, much more so than I had expected. He was seated on a raised platform covered with silk cushions, and surrounded by all the great officers and chiefs, with a body of armed followers drawn up in the back ground. He was very richly and tastefully dressed, and from the particular kind of robes he had on, aided by his rather feminine features, looked more like a young queen than the chief of a tribe. During the interview, he never opened his mouth, except to tell us to sit down, and seemed to be rather uncomfortable in his

\* The capital of the small state of Lus, of which Sonmeanee is the seaport

novel situation. The premier of course conducted all the business."

"It was a long time before I could get permission to visit Shuhr Roghun, the excavated city, but at last I obtained leave to proceed, and, as a compliment, a confidential follower, with a beautiful Khorasan matchlock belonging to the Jam, was sent to attend me.

"Shuhr Roghun is about 9 miles to the W. N. W. of Beylah. At this spot, the Poorally quits the mountains and issues upon the plain. It winds for some distance through a broad ravine with many lateral branches, in one of which the city is situated. It is a most singular place, and I am very glad I was able to visit it. The irregular ravine, which has been chosen for its site, is bounded on each side by perpendicular rocks, four and five hundred feet high, between which the passage in many places is not more than 10 yards broad. The lower part of these cliffs is full of excavations as far as I ascended the ravines — about half a mile; and there are also a great number half way up them and even near the summit, which are now unapproachable. The houses are mostly of a similar plan, having an outer chamber 15 feet square with one side open, which appears to have been intended as a kind of verandah, and gives admittance by a door to an interior room of similar dimensions. The rock is composed of rounded stones of all sizes and of all kinds of rock, cemented together with hard clay (conglomerate); it is of course easily excavated. There is one house superior to the rest, which the natives told me had been the favorite palace of the Fairy *Budd ul Jumaul*, whose adventures with Sy-ful Mullick, and the evil genii form a very pretty tale, which was shown me in Persian at Kurachee. At this part, the ravine is very narrow, and takes a sudden bend. The projecting point of rock rises like a thick wall to the height of about 400 feet, and about half way up it, the palace of the Fairy is seen. The rock has been cut through, so as to form a chamber about 20 feet square, open at two opposite sides. It is entered by a door, and on the other side of the chamber facing it, there are two others leading to two interior chambers \*

I have made some inquiries both at Kurachee and Sonmeanee respecting the cause of the decline in the trade, which all the merchants say, is owing to the state of the country. The Sonmeanee merchants

\* At the town of Teez, which is situated near the port of Chobar in Mekran, Captain Grant visited some caves very similar to those described by Lieutenant Carless. The caves at Teez were thought by Captain Grant to have been places of Hindu worship.

are prevented from sending goods to Kelat, Kandahar or Cabool, by the heavy imports that are exacted from them on the road, by the wild Brahoos tribes. The amount of these depends upon whether the chief is in want of cash or not, and is entirely arbitrary. The merchants say, if the duties were properly regulated, and security to property afforded, the trade would immediately increase to a great extent, and, from all I have heard on the subject, I am certain that until this is done, it will never become larger than it is at present; the Kurachee merchants say the same thing.

"As we have not been allowed to survey Sonmeanee harbour, I have not been able to take the *Palinurus* inside: from an examination made by Mr. Jardine, it appears there is a very narrow channel on the bar, of 16 or 17 feet at high water spring tides; but inside there is a depth of 7 or 8 fathoms. A vessel of any size cannot, however, approach the town within  $2\frac{1}{2}$  or 3 miles."

A letter from John Ross, Esq. dated "Bagdad, 4th October, 1837," addressed to the Secretary, of which the following is an extract.

"I have been doing a little in the way of geographical research for the last few years, but a vast deal yet remains to be done, before I could venture upon laying it before you. By means of getting upon good terms with the Bedouins, I can now with safety go about, and have already twice visited the superb ruins of Hattra, the ruins of Opis and the wall of Mecapracta, the first and last, I believe, never before seen by Europeans. I can easily account for Hattra having never been visited, from the very great danger attending the attempt to do so, but that the wall should have remained so long undiscovered is wonderful, as it is within less than 50 miles of this city. It is still in many places 40, 50, and 60 feet high, twenty five long paces thick, with a bastion at every fifty five paces, and on its northern face is a ditch twenty-seven paces broad: the Arabs call it *Sid Nimrood*, or Nimrod's dyke. Last month Lynch went up and fixed both it and Opis with the greatest accuracy, by means of the beautiful instruments belonging to the Euphrates Steamer."

#### LIBRARY. DONATIONS.

Bruce's Travels; presented by the President.

Voyage autour du Monde, sur la corvette *la Favorite*, sous le commandement de M. La-place, 4 vols.; by Captain Ross.

Transactions of the Medical and Physical Society of Bombay ;  
by the Society.

Oliver's Travels (English translation) ; by *H. W. Morris, Esq.*  
Report on Steam Navigation to India ; by *Lieutenant Ayrton.*

Lord Valentia's Travels, 4 vols. and Sale's Koran, 2 vols. ; by the  
*Secretary.*

The President presented a collection of fossil bones, recently taken  
from Perim Island in the Gulf of Cambay.

A small collection of fossils, (from the Nerbudda ) containing a  
fragment of an elephant's tooth, three specimens of marine shells,  
imbedded in (apparently ) trap rock, &c. was received from Major  
Ouseley, through Major Felix.

The President laid on the table a memoir on the Chagos Archi-  
pelago, accompanied by a variety of charts and drawings, by Com-  
mander Moresby, I. N. This account, from which the following  
information has been extracted by the author's permission, was drawn  
up by Commander Moresby, for the purpose of being presented to  
the Honorable Court of Directors.

The Chagos Archipelago, situated south of that of the Maldives,  
at a distance of about 360 miles, consists of the following groups,  
viz. *Peros Banhos*, the most northerly which contains 27 islands,  
disposed in a circle of 50 miles in circumference ; *Salomon islands*,  
situated to the eastward of the last, consists of 11 islands, forming a  
circle of 12 miles in circumference ; *Eagle island*, the *Three Brothers*,  
and *Danger island* form a scattered group, situated in the western  
part of the archipelago. The *Six islands* lying to the South, oc-  
cupy a circular belt 14 miles in circumference ; and lastly *Diego*  
*Garcia*, or the Great Chagos, which is the most curious island of this  
archipelago. In form it exactly resembles a boot, (the foot being  
placed towards the south ) and consists of a low narrow coral band,  
(inclosing a spacious harbour) continuous on all sides, except to the  
north or north-west, where the entrance leading into the harbour is  
situated. There are besides the *Sandy Islands*, but these appear  
not to be occupied.

These islands form a dependency of the Government of the Mau-  
ritius, and have been under the British rule since the capture of  
that island in 1810. The whole archipelago is divided into 8 estates,  
which have been allotted to private proprietors, who reside at the  
Mauritius, and employ *regisseurs*, or managers to superintend the  
negro apprentices, by whose labor the cocoanut oil is prepared,  
which forms the great staple of the islands. Of this article 120



thousand gallons, according to Captain Moresby's information, are annually produced, and exported to the Mauritius. Asses have been imported for the purpose of assisting the negroes in the labor of expressing the oil, and they appear to answer the object, and thrive well. The pulp of the cocoanut, after the oil has been expressed is also exported to the Isle of France, where it is used for feeding stock.

The vegetation on these islands resembles closely in every respect that of the Maldives : a few European culinary vegetables are cultivated, which have been introduced from the Isle of France. Trees of two species grow here which furnish good timber, one called by the inhabitants *guiac*, the other *tatomacca*; both kinds are well adapted for building, being hard and durable. Another species, the *bois mapou*, (the *roose* tree of the Maldives,) grows to an immense size on all parts of the islands. The wood is soft and spongy; the tree is of quick growth and decays rapidly; it is then soon blown down, and, in a few months, is decomposed into a fine black mould.

The animals observed here are similar to those inhabiting the Maldives, with the exception of three species—the crow, the sparrow, and flying fox\*, which, though numerous on the latter, are not found on the Chagos.

The Author has figured two of the species of crustacea, which are common on the Chagos. The first is a *Palinurus*, closely allied to the *P. marginatus* of Quoy and Gaimard; the other is a *land crab*, as it is called by the inhabitants, the *pagurus latro*. This animal, which more nearly resembles a lobster than a crab, is the largest of the genus, and attains a great size. It feeds entirely on cocoanuts and is provided with very powerful claws. It is said also to possess the power of climbing up the cocoanut trees, and can be kept alive for any length of time on ship-board if supplied with usual food, without appearing to suffer from the privation of water. The flesh of the tail is eaten by the inhabitants, and is esteemed by them a very rich and delicious aliment.

The population consists entirely of negroes, and a few French creoles, who are attached to each establishment as superintendents. The number of the inhabitants is not stated, but some interesting details are given regarding their condition and mode of living, &c.

The fresh water is good, and procurable at the depth of four or

\* The large bat common in this part of India is so called. Specimens brought from the Maldives by Captain M. last year were found to be identical with the large bat met with in the cocoanut woods of this island, the *Pteropus medius* : Temm.

five feet ; wells situated at a distance of from 200 to even 50 yards from the beach produce good water. In such situations the water of the wells undergoes a periodical rise and fall, according to the state of the tide. This phenomenon was carefully observed by Captain Moresby in a well situated on the estate of Mini-Mini, on Diego Garcia. The depth of the well was six feet, and it was situated at the distance of 85 feet from high water mark. The upper margin of the shaft was found to be 18 feet above the level of the surface of the sea at high water, spring tides, the period at which the observation was made. It was found, that at half flood the water in the well stood higher than that of the sea by 23 inches ; at high tide, the surface of the well water was observed to be 23 inches lower than the surface of the sea. The total rise in the well amounted to  $9\frac{1}{2}$  inches, that of the sea to 6 feet 3 inches, during the springs, and 5 feet 6 inches in ordinary tides.

These islands are occasionally visited by earthquakes, which however are not of a destructive character. Captain Moresby was informed by one of the managers that, on Salomon islands, an earthquake was experienced in 1826, and another at Peros Banhos in 1828. Mr. Horsburgh mentions that, in 1812, when he was shipwrecked on Diego Garcia a report was circulated that an earthquake had torn away one of the small islands at the entrance of the harbour, but Captain Moresby concludes that this effect could not have been produced, for by comparing the chart by Mr. La Fontaine, published in 1770, with that constructed by himself in 1837, it will be seen that no change has taken place since the former date, either in the number or appearance of any of the islands situated at the entrance of the harbour. Captain Moresby here further observes, that the earliest French charts proved to be remarkably correct in the delineation on the banks and islands composing this archipelago, so far as these had then been explored. No change was observed either in the depth of water on the banks, or in the situation, form or number of the islands, since the time these surveys were made, a period of 80 years.

Masses of pumice-stone are constantly found on the beach of the islands. The source whence this mineral is brought to their islands is unknown to the inhabitants, but it is conjectured to be thrown up from the bottom of the sea. One piece in Captain Moresby's possession, measures 37 by 27 inches, and weighs 8 lb. 12 oz. As to their geological structure, these islands like the Maldives, as is well known, belong entirely to the coral formation, none of the older rocks being met with, and those that form the islands being composed solely of

calcareous or coral sand, shells, and fragments of coral, exhibiting considerable variety both in their structure and hardness. An attempt was made by Captain Moresby to penetrate through the coral formation, and to reach the older subjacent rocks by means of the boring rod, but he was obliged to desist after reaching 12 feet. A previous attempt had been made on one of the Maldives, on which occasion the rod penetrated to the depth of 26 feet, but in consequence of some accident, the experiment could not be prosecuted sufficiently far, to enable the surveyors to obtain any useful results.

The periodical winds, and weather which prevail among the Chagos are well known to navigators. The climate is agreeable, and the currents follow the direction of the winds: for four months, from the middle of December to the middle of April, that direction is eastward; and westward for the remaining four months, varying however, a little to the north or south of these directions. In April and during a part of May, the currents are variable, as they are also during the month of November and part of December. The greatest velocity experienced amounted to two miles per hour, this was observed on the Chagos bank when the tide and current flowed in the same direction.

#### PAPERS PRESENTED.

*I. Statistical account of the town of Bhooj, with a sketch of the inland trade of the Province of Cutch.* By Lieutenant T. Postans, 15th Regiment, N. I.

As the description of this town and its environs has already occupied the pens of the late Captain McMurdo, Dr. James Burnes and others, the author confines himself to an account of the manufactures and trade of Bhooj. On these subjects the author's observation are full and minute, but as the paper will shortly be printed entire, the present notice will be confined to the following extract.

"Bhooj the capital of this province (Cutch) is distant 36 miles from Mandavie, the principal seaport, and twelve miles from the great Runn. The town is walled and is said to contain a population of 20,000 souls.

"Its walls, thirty-five feet high and four feet thick, are kept in excellent order, and the numerous trees interspersed throughout the town, with the tank and gardens in the south and west, combine to give to its distant view a picturesque and pleasing effect. The interior of Bhooj, however, presents a great contrast to what might be expected from an exterior view: the houses are low, and the streets narrow

and filthy to a degree. The only buildings worthy of notice, are the palace and a substantial musjeed; the latter in the southwest corner, within the walls. The residence of the Rao is an irregularly built, but highly ornamented pile, which the present Rao Daisuljee, with a praiseworthy spirit, is enlarging and restoring from the state of disrepair, in which it had been allowed to remain during his father's dissolute reign.

" The musjeed is the property of Syud Buddurud Deen, whose father Mahomed Punnah, was invited from Delhi by Rao Rahideen, when that prince embraced the Mahomedan religion. It is enclosed, and has some fine terraces, with a large reservoir of forty steps and a depth of sixty feet; it also contains a library of about 1000 Persian and Arabic manuscripts. The works are for the most part religious commentaries, and profane histories of little moment: their owner, however, a fat and stupid descendant of the prophet, guards them with a jealous eye, being firmly convinced that amongst them, are some treatises on Alchemy, which contain the true recipe for the philosopher's stone. There are other and smaller musjeeds in the town; and the Mahomedans of Bhooj, may be estimated at about 6000, probably half of the whole population.

" Some of them are employed in high situations in the Durbar, as Moonshes, &c. The Mehmans or Borahs in Cutch, as elsewhere, are a very industrious, enterprising and useful class of people. The saltpetre, alum and iron\*works are under their superintendence. And at Anjar and Bhooj, they are distinguished as traders. I have not had the opportunity at Bhooj, of procuring a correct census of its inhabitants, but they are generally understood to be between 18 and 20,000.

" The climate of Bhooj, is generally healthy, but the heat is proverbially great, and during particular seasons, frequently oppressive. Subjoined is a thermometrical summary for the preceding seven months of the present year, the season having been unusually dry; the register is for the camp, distant about a mile from the city; within the walls of the latter its range would be much higher, and considering the circumstances of filth and want of free circulation of air, it is extraordinary that the inhabitants are so generally free from disease as they appear to be. The nights are cool, and the hot winds which the sandy and rocky nature of the soil tend to render unusually severe

\* Iron is smelted in some quantity at a place called Dhodae in Wargur, to the east of Bhooj.

and scorching during the day, cease immediately after sunset. Although the distance between Mandavie and Bhooj, is so trifling, a greater contrast than is presented between the climates of the two places, can hardly be imagined. That of Mandavie being refreshing and cool, and exempted from the occurrence of those hills between the alternations of the land and sea breezes, which are usually found so oppressive on the coast. The range of the thermometer at the latter, would give probably an average of  $15^{\circ}$  lower than Bhooj. The water from the wells in camp and near the city of Bhooj, is hard and brackish; in the former, which is situated on an elevation and immediately under the hill fort, it is found at a depth of about seventy feet, the rock perforated being generally composed of a friable description of sandstone. A harder description of the same stone is used for building; and lime-stone, in great abundance, is found in the Lunkhi hills to the south and east. Basalt enters much into the formation of the hill of Bhooj, on the very summit of which it is to be observed, and in no part of Cutch do the volcanic rocks more prominently present themselves, than in the immediate vicinity of Bhooj, where they often rise in narrow ridges extending for a considerable distance at inclined angles to the plain, and often as high as twenty feet above it: volcanic scorix are plentiful."

## II. Reports on the trade of the countries bordering on the Indus, containing :—

1st. *On the Commerce of Shikarpoor and Upper Scinde.* By Captain A. Burnes.

2d. *Report of a visit to the three cloth manufacturing towns of Ranipoor, Gambat, and Kodá.* Lieutenant R. Leech, Engineers.

3d. *On the trade of Khairpoor in Scinde.* By Moonshee Mohun Lal.

### PRESENTED BY GOVERNMENT.

The two last of the above papers being devoted exclusively to the subject announced in their respective titles — that of Lieutenant Leech to the manufactures carried on in the towns of Ránipoor, Gambat, and Koda; and that of Moonshee Mohun Lal to the trade of Khairpoor, contain little information of a geographical nature that can be extracted with advantage or justice to the authors. Captain Burnes' paper, which contains some interesting geographical, as

well as commercial intelligence, is printed entire, and appended to this report.

*III. Notes on Customs prevalent among the Maldivians, &c.* By Mr. W. Christopher, Midshipman, I. N. Presented by Government.

Mr. Christopher is the author of a memoir on this subject drawn up conjointly with Lieutenant Young, and printed by the Society on a former occasion. The present communication may be considered a supplement to the memoir in question, the author's object being to supply some omissions which occur in the latter, and particularly, to point out certain remains of Buddhist usage at present prevailing, or which not long since prevailed, on the islands, which confirm the general opinion regarding the original connection of the Maldivians with the people of Ceylon.

The first instance cited, refers to the manner in which they deposit the body, after death in the coffin. Laval has minutely described this position:—

“The right ear was placed on the right hand, and the left arm along the thigh, then the body was laid in the coffin on its right side. Any one who has seen the gigantic figures of Buddh in a recumbent posture, so common in the Singalese temples, will immediately recognize the above description as strictly applicable to them; it seems likely, that the islanders retained in Laval's time many predilections in favor of their ancient religion, and among others probably this rite in burial, &c.

“The Maldivians in Laval's time were accustomed also to wear long hair. Although professed Musulmans, they had not given up this well known heathenish custom, but the permission to wear it was confined to titled men and soldiers.\* I may mention by the way, that a priest of the Buddhist religion, who was considered a clever man, and well read in Singalese books, informed me, that there were formerly two noted temples of Buddh on the Maldives; and he named the islands on which they were situated, but I could not recognize them as perpetuated to the present day.

“The tree commonly known in Ceylon by the name of Buddh's tree, \* it being regarded by the Singalese as sacred to Buddh their great teacher, is still suffered to stand alone in the vicinity of mosques

when all other shrubbery is cleared away for the burial ground ; this fact affords no slight evidence of the faith that formerly prevailed on the islands.

" The dread the Maldivians manifest of taking animal life, ( which the Singalese are not allowed to do, ) is probably one powerful reason for their not having more cattle on the islands ; there are very few who are even yet bold enough to kill a fowl, and we have sometimes been told, that from want of a man in an island or Atoll, that knew how to do it, the fowls were suffered to run wild in the jungle, and were never caught.

" The white umbrella, I find, was considered one of the insignia of royalty among the Singalese formerly, as it is now by the Maldivians.

" The quarrels which occurred among the Singalese regarding distinctions in dress, became so frequent and serious, that the Governor interposed his authority, and issued an order, some few years ago, annulling the arbitrary rules on this subject, which had received the sanction of the Dutch government, and all restraint was removed from the lower castes. It is remarkable, that many of the rules that were annulled as above, are now in force among the Maldivian islanders. Wearing any clothes above the waist ( unless on the head ) is considered presumption in a low caste man, who has no official nor inherited rank, so that an untitled man, with even a loose white cloth on his shoulders, lowers it to his waist when in the presence of a superior.

" The first grade of rank can be purchased of the Sultan for 1,000 larinis, or about 350 rupees, on which occasion a public crier gives notice at the head of the principal streets on Male, that such a person has obtained the distinction ; the affix ' Kalo ' is applied to the names of all who have no rank ; the above sum will entitle a man to be called " Kelege ; " no money can purchase higher."

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**IX. *On the Commerce of Shikarpoor and Upper Scinde.* By Captain A. Burnes.**

Shikarpoor is a town of first importance to the Indus trade, and it may be said to that of Asia. This does not arise from any superiority in its home manufactures, but from extensive money transactions, which establish a commercial connexion between it and many remote marts. Shikarpoor stands near the northern frontier of the Scinde territories, 28 miles directly west of the Indus, and about the same distance from the fort of Bukkur. Towards the north, the Scinde boundary extends to Rozan, on the road to Candahar and Kelat, by the well known pass of Bolan, so that the merchant always speaks of Shikarpoor and Dera Ghazee Khan, as the gates of Khorasan, by which name they here distinguish the kingdom of Cabool. In every direction, commercial roads conduct the trader to Shikarpoor, but the communication is entirely carried on by land, though there is but one sentiment among the merchants of the town, great and small, that their profits and interests might be vastly promoted by water communication.

2. Shikarpoor is not a town of any antiquity, though there has always been a place of note in its neighbourhood. Alore, Shukkur Bukkur, Roree, all follow each other, and the present town has succeeded Lukkee, a place 8 miles south of it, which was held by the ancestors of the present chief of Bhawalpoor, who were expelled by Nadir Shah. It appears to have been built A. D. 1617, since its date is preserved in the Arabic word غورك or frog, the numeral letters of which give the year of the Hejra 1026, the word likewise conveying some idea of the neighbourhood, which lies low. The slope of the country favors its easy irrigation, and the Emperors of Delhi have caus-



ed extensive canals to be cut from the Indus, Shikarpoor is supplied with abundance of food and cheaper than any part of Scinde. The obscure term of "*Now Lakke Scinde*," I am informed, has reference to this part of the country, that being the amount of revenue, above Scinde proper, derived from the province called Moghulee. Natives of Shikarpoor who have seen British India generally describe it, as capable of being made "a second Bengal." Nadir Shah visited Shikarpoor in his conquest, but its vicinity to countries so much disturbed, prevented its becoming a commercial mart, till the Suddozye princes fixed their authority in it, and its prosperity may be dated from the year 1786, in the reign of Timour Shah, who first established Hindoos in the town, after he had conferred the Government of Scinde on the family of the present Ameers. Shikarpoor is the only place in Scinde, where that tribe have established a paramount influence of which the Ameers have as yet had the good sense not to deprive them, though Shikarpoor has been subject to Scinde for the last 16 years. The revenues and expenses incurred in defending it, are divided between the Hyderabad and Khyrpoor chiefs, the latter having three shares, and the former four.

3. The population of the town exceeds 35,000 souls, but it is to be remembered that there are Hindoos from it scattered all over Asia, who leave their families here, and return in after-life; the inhabitants consist of Hindoos of the Bunnia, Lohana, and Bhattea tribes, but Baba Nanuck Seiks compose more than half the number. About one-tenth of the population is Mahomedan, most of whom are Afghans, who received grants of land or "puttas" as they are called, from the name of the deed, and settled around Shikarpoor in the time of the Dooranees. The town, though surrounded by gardens and trees, is quite open, for a mud wall, which has been allowed to decay, can scarcely be called a defence. There are however eight gates. The bazar is extensive, having 884 different shops. It is covered with mats as a shade from the sun, but has no elegance or beauty. The houses are built of sun-dried bricks, lofty and comfortable, but destitute of elegance. The climate is considered very hot and oppressive in the summer, and there are so many stagnant pools around the walls, that it is remarkable the people do not find the place insalubrious, but it is not said to be so. The thermometer had a range of 23 degrees in the middle of April, falling to 59° and rising to 82°; but we were informed that the season was favorable, and across the Indus at Khyrpoor the thermometer had already stood at 96°. Water is found at 12 or 15 feet from the surface, but the river has, for 3 or 4 years past, flooded large tracts of the neighbourhood. The land revenues around, exclu-

sive of expenses in collection, &c. now average two lacs and a half of rupees per annum, and the duties of the town and customs are farmed for 64,000 rupees, the currency being only inferior by 2 per cent, to the Company's rupee. This does not, however, include the whole of the districts, which were held by the Afghans, Noushera being under Ladkhana, and several rich jagheers bestowed on religious persons. The inundation having lately inclined towards Shikarpoor, has also increased its present revenues, probable to half a lac of rupees, but the addition cannot be considered permanent.

4. It will only be necessary to name the towns, at which the Shikarpoor merchants have agents, to judge of the unlimited influence which they can command. Beginning from the west, every place or note from Astracan to Calcutta seems to have a Shikarporee; thus they are found at Muscat, Bunder Abbass, Kerman, Yezd, Meshid, Astracan, Bokhara, Samarcand, Kokan, Yarkund Koondooz, Khoooloon, Herat Subzwar, Candahar, Ghuzni, Cabool, Peshawer, Dera, Ghazee Khan, Dera Ismael Khan, Bukkur, Leia, Mooltanooch, Bhawalpoor, Umritser, Jeypoor, Bikaner Jaysulmeer, Pallee, Mandavie, Bombay, Hyderabad (Deccan,) Hyderabad (Scinde,) Kurachee, Kelat, Mirzapoor, and Calcutta; the Hindus of Astracan, I am informed, have lately been converted to Islam, and, within these two years, those of Bokhara have been molested, for the first time, on account of their creed. In all those places, however, a bill may be negotiated, and, with most of them, there is a direct trade either from Shikarpoor or one of its subordinate agencies. The business seems, however, to be more of a banking nature than a commerce in goods, but still there is not any great quantity of ready money at Shikarpoor, for there is no mint at which gold or bullion may be coined, and consequently a loss ensues upon its import.

5. The direct trade of the town of Shikarpoor itself, is not extensive; its port is Kurachee from which it receives annually,

British goods to the value of.....	Rs. 30,000
Sugar.....	80,000
Spices, Groceries, Metals.....	100,000

Total Rupees 210,000

Some of the articles reach Shikarpoor by way of Pallee, in Marwar, particularly sugar and spices, but British cloth is not sent, for the line of route, from this great emporium, leads higher up the Indus to Bhawalpoor and Mooltan. The duties on this road are as follows,—

on articles of bulk 6 Rs. per camel on quitting Shikarpoor, 4 Rs. on the river, 8 Rs. in the Khyrpoor territory, 6 Rs. in Jaysulmeer, making a total of 24 which is doubled, if other than groceries (Kiranu). At Pallee itself goods pay ad valorem from 2 to 5 per cent. The road from the sea coast is quite safe; it passes among the hills to Sehgun, and after that reaches the plain of Chandka; five or six caravans pass yearly, but 8 or 10 camels even go safely. The expenses of the road are as follows:

Landing at Kurachee. . . . .	5 Rs. per cent.
And at starting. . . . .	3 " ditto
Expenses to Shewun. . . . .	2½ " per camel load.
At Shewun, duty. . . . .	24 " ditto
At Ladkhana. . . . .	7½ " ditto
At Maree. . . . .	½ " ditto
At Shikarpoor . . . . .	24 " ditto

Total 58½ Rs.

exclusive of the duties at Kurachee. This does not include the hire of the camels, which is 8 or 9 rupees per head if laden with cloth, and 6 or 7 with metal or sugar. The duty above given is only leviable on goods, that on sugar and articles taken in bulk is much less, and at Shewun but 11, instead of 24 rupees, and at Shikarpoor but 10 rupees instead of 24. It was very difficult to give an accurate list of these duties, for at Shewun, though the levy ought to be 32 rupees, it is compounded for at 24 rupees, by what is called a "mootta" purwaun, which, on land, is much the same kind of duty as toll by the river. Great merchants only have this advantage, and they will not trade till it is promised to them. Arriving at Shikarpoor, likewise, the levy depends much upon the value of the articles, which are, taxed by weight, though a camel load of chintz may be passed through the custom house at rupees 24, each piece of kincob will be taxed perhaps from 1 to 2 rupees. These duties are, therefore, considered oppressive and vexatious, as the bales are opened and examined. Further, if it is intended to send on goods, a second tax of 8 rupees on cloth, and 5 rupees on spices, &c., is exacted on quitting Shikarpoor for the West. The effect of this has been to throw open the road from Candahar, by Kelat to the sea coast at Sonmeeanee from which much of Afghanistan is now supplied, and of which we shall have occasion hereafter to speak. The trade from Bombay to Shikarpoor, however, often yields a profit of 20 per cent.

6. From the North, Shikarpoor at present receives the cloth of Mooltan and Bhawalpoor to an extent of rupees 10,000, but these are for home consumption, as its peculiar trade is with Khorasan, by way of Candahar and Kelat; with the former it communicates, through Bag and Dadur, by the celebrated defile of Bolah, which is passable at all season; goods are carried on camels and ponies, and there are three or four caravans annually. The articles consist of madder and other dyes, such as koomba, saffron, cochineal; also silk thread, torquoises, dried fruits, horses, &c. &c, which are valued at from one and a half to two lacs of rupees a year. Some of the silk thread brought to Shikarpoor is of a very superior description, where it is used in embroidery. It comes from Toorkistan, and is called "Kokanee" and seldom sent lower down the river. Besides it, there is the "Toonee" silk from Kaeen, the "Duryaee" from Khaf, and the "Chilla" from Herat, which are used at Shikarpoor and also sent on to India. The mulberry tree thrives in upper Scinde and yields a superior fruit, but there are no silkworms, though the climate would probably agree with them. The trade in Feerozees or torquoises is considerable. As it is well known, that beautiful stone is brought from Nishapoor in Persia. It is imported here in its rough state. There are about a dozen shops where they are prepared, after which they are sent on to India. Some Feerozees reach Hindustan by way of Cabool, but the greater number are sent by Shikarpoor, where the import is so extensive, that all classes, rich and poor, have ear-rings and ornaments made from them, good or bad, of course, according to their circumstances. This trade is valued alone at rupees 50,000 per annum. The trade in horses has declined, and the supply varies. From five to eight hundred horses come down the Bolan pass yearly, chiefly from Candahar and Shawl—the greater number, however, go to India, by way of Kelat and Kurachee. Those which are brought to Shikarpoor are sent to all parts of Scinde, to Khyrpoor and Hyderabad, and sometimes to Bhawalpoor, for there is no steady demand and no permanent mart. These are too well known to require any particular description—they are in general undersized and bull-necked. In return for these articles, Shikarpoor supplies these places with native cloths, made in the manufacturing districts of Raneepoor, Gumbat, and Korra near Khyrpoor, also at Ladhkana. The home manufactures of Shikarpoor itself do not amount to more than 50,000 rupees of coarse white and red cloth, and this is consumed in the town. English goods, however, are sometimes purchased by Afghan merchants, in exchange for their productions, if the market

is well stocked—as they may have them cheap and be saved a journey to Bombay, but the duties prevent their taking any great quantity, so that they have indigo of Khyrpoor and Oobaro, and prepared hides from Ladkhana and the valley of the Indus, which would in all probability be sent down, if the road were open. The profits of the trade from Candahar are rated at 40 per cent. and to it at about half that sum.<sup>4</sup> The former was much greater than at present till the Candahar Sirdars taxed the ducats and gold, sent to India, as merchandize, a custom, however, which is common in Toorkistan, and which when we consider the number of merchants who deal largely in money alone throughout Asia, is not so unjust as at first sight may appear.

7. Upper Scinde has resources that have not as yet been developed, and which are even open to the notice of a superficial observer, and require but little impetus to send them forth. Cotton which has been but little exported hitherto, and bore the value of 21 Rs. per maund, was last year raised round Shikarpoor to the extent of 10,000 maunds of Lahore, (which is about the same as that of Shikarpoor) and such is the profit upon it that a small investment, which was sent down the Indus to Vikkur as an experiment, and which had been purchased at from 8 to 9 Rupees per maund of Vikkur, (which is considerably less than that of Shikarpoor) sold for 15 Rs. of Tatta. It was always sent to Ullah Yar and Adum Yar, in Lower Scinde, also to Shawl, but it may now, as its cultivation increases, be calculated upon as a regular export to Bombay. The cotton of Lower Scinde is not appreciated; this is considered better though not of the first kind. It would not be difficult to encourage the cultivation, and perhaps treble the supply; in one sense of the word, there are two crops of cotton in Scinde. The seed is sown in April and the harvest reaped in July, but the roots are often left in the ground, and, sprouting up in the following spring, yield a second crop, in May about a month after the waters of the swell reach the fields. The first kind is called “Nairee,” and the other “Moondee,” which are terms merely meaning new and old. The richness of the crop depends altogether on the rise of the Indus which is not however precarious.

8. Opium is reared at Shikarpoor, but has only been cultivated for last 6 or 8 years. A trial has been made of its export to Bombay, but as there was no linseed oil (ulsee) except what was imported, to prepare it, the article was not approved of, and the speculation failed. *It has been lately sent to Pallee* in its raw state, where its preparation is understood, and from which it is said to be exported at

the same price as other opium; linseed has now been sown at Shikarpoor and thrives, so that it is possible hereafter to export it direct. It was formerly received from Marwar and Kelat. I have been informed that the Shikarpoor opium has not the same strength as that of Malwa, and the difference is said to arise from that of Scinde being irrigated, which is not the case with the poppy in Malwa. (?) Last year, 100 maunds of opium were produced at Shikarpoor, the best near the village of Maree. A jureeb of ground, which is 22,500 square feet, about half an acre, yields on an average 5 seers of opium, the heads being tapped three successive times. In its wet state, the value is about 5 rupees per seer, but it has much impurity from the scraping of the poppy, &c., in its dry state; its value is  $8\frac{1}{2}$  rupees and sometimes double. It is reaped in April and May after a four months labor. It is thought advisable to encourage this trade, as it will furnish a very valuable return.

9. The indigo of the Shikarpoor district is not prized as much as that of Khyrpoor and Oobaro, east of the Indus, nor is the cultivation so extensive. A better description of indigo than either is found higher up the river, and will form a subject for future notice, but at present this dye is exported from Scinde to the Persian Gulf by Kurachee, to the extent of 1500 maunds a year, which, as it now sells, is about the value of a lac of rupees. It varies in price from 40 to 60 rupees according to the rise of the river on which, as with cotton, the crop depends; it is now selling at Rs. 57 of the best kind per maund. This year a demand for it beyond the crop, though that was productive, has arisen, and 90 camel loads of it have been brought by land from Khanpoor in the Daoodpootra country, and sent, by Jaysulmeer, to Pallee. The indigo of Scinde cannot rival that of Bengal, or as it is called, "Neeli Furhung" (English indigo,) having much more impurity, but it is only about half the price, and is said to have some advantages in imparting color of a more fixed kind. It is exported to Candahar, but Khorasan derives its chief supply from Mooltan, where it is better. The supply for Arabia and Persia may very easily be drawn off by the Indus, at a great profit with a toll so light as that which has been imposed.

10. Besides indigo, there is an article in Upper Scinde called "Sakur," used as a red dye. It is merely the knot of the tamarisk shrub, but it is not produced in all soils where that plant grows. In the district of Boordgah it is procured in great abundance and to the extent of 1500 or 2000 maunds, and can be profitably exported to Marwar, Pallee, and Lower Scinde. It sells here for 2 rupees per

maund. The article is procurable near Moolan. Koomba or 'Kus-soomba,' which is safflower, a plant that yields a rich dye, is also reared, but a much better kind is imported from Cabool, a seer of the one being equal to two of the other, so that they are often mixed and adulterated. This dye is spoken of as the second saffron.

11. But Upper Scinde is much favored by the inundation of the river: for the last four years the Indus has saturated the country around Shikarpoor by throwing of its superfluous water from Boordgah to Ladkhana. This district was called "Wahnee," from having no water, but it is now said to yield nearly a lac of rupees annually to Government. It extends 70 or 80 miles from Ghouspoor to Ladkhana, and varies in breadth, from 5 to 6 miles; without this natural scattering of the water, it would not be an arduous task to keep the Scinde canal open for six months; at present, the town is to be approached by it for four months by the largest boats. At Shikarpoor, in April 1837, wheat was selling at 15 rupees per khurwar, while at Hyderabad it cannot be bought at less than 24, and at the mouth of the Indus it yields 45. This is not speculation, for it has been tried, and as the toll is leviable on bulk, all other grain may be exported from one part of the Indus to another, at a very great profit. At Shikarpoor, for instance, Juwaree sells for 10 and 12 rupees per khurwar, and at the mouth of the Indus, for 25 and 30, and in Bhawul Khan's country, rice does not bear a higher value than a rupee per maund, though it is of the first quality, while it sells at Shikarpoor for  $2\frac{1}{2}$ , but in the Delta again this grain is very cheap, so that while it may be sent from one section of the river to another, it would not perhaps prove a profitable export for the voyage. This would not however be the case with ghee, which in the Oobaro sells for 8 rupees per maund, and at Shikarpoor for 16 rupees, but though cheaper in the Delta, the export to a foreign country might be yet made with great advantage; in fact the profit of some articles would be double and even treble their value. The oil of the Sesamum would yield a profit of 25 per cent. It sells outside Shikarpoor for  $3\frac{3}{4}$  rupees per maund, and in the Delta for export, at 8 and 9 rupees, and the maund of Vikkur, is four fifths that of Shikarpoor. Sugar, salt, spices, and groceries, may all at present be brought up and down the river with advantage, and a mixed cargo and grain will alike yield profit.

12. The wool of Scinde is not considered of a good quality, except in Boordgah, a district north of Shikarpoor, where the sakur dye before described is found and whence it has not yet been ex-

ported. I state on pretty good authority, that 800 camel loads of a superior article, may be procured in the hills, but the tribe of Boor-dees are great robbers, and precaution is necessary in dealing with them. The immediate districts of Shikarpoor, also yield small quantities of wool, but in Cachee, westward of Ladkhana among the hills it might also be procured as well as at Deejeekot and the country east of Khyrpoor to an extent, as I am informed, of about a third of this. Jaysulmeer and Becaueer yield very superior wool, and they are but 180 miles from the Indus, but, as doombas or fat-tailed sheep yield the best wool, Kelat is always spoken of as the great mart for this article. The Brahooees, or people of that country, are beginning to appreciate the value of wool. Two years ago, some of them took a small quantity to Bombay, which had been bought at 3 rupees per maund and which realized 20. The effect of this was the despatch of 100 camel loads last year, with as much profit to the exporter as before, only that the Khan has now imposed a duty of 2 rupees on each load. In Scinde, there are few or no woollen fabrics, except coarse bags, carpets, and Shalkees. It sells at 12 and 15 seers per rupee. In Kelat itself pelisses only are made from wool. Besides Kelat, the wool countries in this neighbourhood are Shawl, Mustoong, Nulwad and Kejmekran. That of the two last may no doubt be best exported from the sea ports of Guadur and Sonneanec, but the outlets of the other will in course of time, be the Indus. Cabool and Toorkistan are, however, wool countries, and as there is such a demand for this article, I have no doubt it might be sent from Attock to Bombay with profit, even though it has been, in the first instance, brought from beyond Hindoo Koosh. Besides wool, horse-hair might be imported with advantage from Scinde and Cabool; small quantities of it are now taken by horse dealers.

13. In Upper Scinde the places next in importance to Shikarpoor, are Khyrpoor, Ladkhana, and the manufacturing towns of Gumbat, Raneepoor, and Koora. Lieutenant Leech has given, in the annexed paper, an account of these three last places, and the minute description of all the fabrics procurable in them. I also annex from Moonshee Mohun Lal an account of the trade of Khyrpoor, giving minute particulars regarding that mart. Ladkhana has a much larger population than these three towns, having about 12,000 souls. It manufactures yearly cloth to the value of from 50 to 60,000 Rupees, which is exported on camels to Kelat and Lower Scinde, but though they are sent to the Delta by a land route, a great profit is derived, since a score of white cloth, which costs 20 to 21 rupees sells there



at 40 and 43 rupees. Nothing from Ladkhan, but Government grain is now sent by the Indus. It consumes about 15,000 rupees of British goods. The custom house duties of its gate yield rupees 4,000 a year, and the surrounding district, half a lac of rupees as the Government share of produce. Khyrpoor is the residence of the Ameers. It receives English goods from Kurachee by Ullah-yar and Adum-yar-ka-Tunda, to the extent of Rs. 25,000; from Mooltan and Bhawalpoor to the extent of 20,000; from Ranneepoor to 2 or 3,000. It has no native manufactures. It is without sugar; 400 maunds of cotton are reared, and a small quantity of opium. Nitre may be had in any quantity at Sukkur. Salt is also made and sells at rupees 15 per maund. The rock salt of Pind Dadun Khan on the Jelum, sells at the mine, after a monopoly and exorbitant exactions, for  $1\frac{1}{2}$  rupees per maund of Lahore, and the Hindoos of Scinde prefer it to all other salt. At Pind Dadun likewise boats are to be had cheaper than any place on the Indus, and for some time, till the number on the river are increased, would become a good speculation, as one which costs 300 rupees, may be sold for seven and eight hundred at Hyderabad and the up country; boats, though sometimes preferred to those lower down, may be broken up and built into Doondees.

14. The customs of Khyrpoor are farmed for rupees 17,000 per annum, 2,000 of which are realized on the imports from Hyderabad, and 2,000 from what is sent there. The Khyrpoor Ameers are said to receive 100,000 rupees by duties throughout their territories on imports and exports. The transit on goods passing the Indus from Kurachee to Khyrpoor *direct* are as follows. Landing at Kurachee ad valorem 5 per cent.

	Rs. Korie.
By Hyderabad to Adum Khan-ka-Tunda . . . . .	12 per Camel.
At Kanote . . . . .	3 6 „
Kaywaree in the Nara . . . . .	3 8 „
Deejee . . . . .	2 8 „
	<hr/>
	21 6 „

On reaching Khyrpoor, the duty is no longer levied on the camel load, but on a valuation of the articles; thus a piece of English chintz pays  $7\frac{1}{2}$  annas, and if the piece be very large, it is reckoned as 3 and taxed accordingly. Mooltan chintzes pay one rupee per score, and if passed on to another place in the course of a month,

nothing additional is exacted ; if after that time, the tax is repeated. At this present time, English goods are from 10 to 12 per cent. dearer at Khyrpoor, than Hyderabad. The taxes of Khyrpoor are lighter than in any other part of Scinde. There are two villages near Khyrpoor, Tanda Mustee and Lookinad, where no duties are exacted unless the goods are sold, and only a very light transit of 10 annas per camel. From Khyrpoor to Subzulcote, the northern frontier of Scinde, east of the Indus, a transit (rahdaree) duty of 20 rupees per camel is levied. On the west of the river from Shikarpoor to the Seik frontier, there has been lately no open road on account of the lawless habits of the tribes, but as there is now little to be feared on this account, the tract, which is a good one, will come into use, particularly as a short cut between Shikarpoor and Methuncote.

15. The transits and duties leviable on the routes east and west of the Indus, to the frontiers of Scinde have been stated. I might here note the amount of toll and duty, which was levied on the river previous to the treaty, but the statement would be long, complicated, and not much to be depended on, from the many chiefs who shared in it and the varied mode of exaction : in some places a toll, in others a duty ad valorem, according to the will of the ruler, but in all instances after such delays that trade had entirely disappeared. The last instance and a very illustrative one it is, which I can hear of any commercial speculation being carried on before the British turned their attention to the improvement of this commerce, was that of two Hindoos, who, about 12 years ago, brought down grain to Shikarpoor, in a season of scarcity. From Methun to that town they paid about 280 rupees of duty on each boat of grain, for a section of the river where a toll of rupees 60 is now leviable, and from Methun to —\* but rupees 240 ! The commercial results of the downward navigation of the Indus as far as they have yet been tried, have proved very satisfactory, so much so indeed, that for a time it will probably turn out a more profitable speculation to send down bulky goods, as sugar, &c. which can be procured higher up, *though they have previously made a long journey*, than navigate without steam, from the sea. The sugar from Lodiana, brought, I believe from Mucumpoor, yielded at Shikarpoor 24 rupees per maund, though its original cost had been but 5 rupees. This would, however, be greatly diminished if the trade from Bombay is persevered in, but,

in any case, the means of supplying Khorassan with this great necessary of life, is much facilitated by this route.

16. The great advantages to be derived from the downward navigation, as now exhibited, lead me to note some practical facts concerning that subject at the period when, as it has been established beyond doubt by Lieutenant Wood's printed reports, the Indus falls to its lowest, the months of February and March. This happens to be the season at which the rice and juwaree crop of Upper Scinde is brought down to Hyderabad, and ascending the river during these months, we met about 250 vessels. They were very deeply laden, some within a few inches of the water, and drawing from 3 to 5 feet water, and one, which Lieutenant Wood measured, had the large draft of 5 feet 6 inches. Their mode of procedure was any thing but satisfactory, since they made many halts, advanced but 8 or 10 miles a day, and always had a pilot-boat a-head to direct their course and prevent accidents, for it was evident that if such heavily laden vessels missed the channel and took a bank it would be most difficult to drag them back. I pointed out these circumstances to some Shikarpoor merchants, as a disadvantageous character of the river, at all events in February and March, since so much delay would involve loss of interest and profits in a boat having a cargo of merchandise. They, however, informed me that grain boats were always overloaded, that they had a greater object in getting safely than speedily to Hyderabad, and that they carried as much as they could since their heavy cargoes saved other boat hire, and the grain and the boats generally belonged to Government. Nursingdass a Shikarpoor Dulal, however, produced one practical proof of this assertion, for he accompanied the Lodiana investment from Shikarpoor *in the beginning of March*, reached Hyderabad in six days from Shikarpoor without accident. The vessel, however, was "Zohruk," or up country boat, with a tonnage of 60 Khirwars, and, having mixed cargo, might have carried ten less than her burthen. She descended without pilot or guide, first to Hyderabad and then to the sea; the latter part of the voyage being a little more protracted, but only on account of the southerly winds.

(Signed) A. BURNES,  
On a Commercial Mission to Cabool.

Bhawulpoor, May 6, 1837.

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X.—*A short account of the Kattouries or Katthuries (कातकरी) residing in the Konkan and Attaveessy.* By Major A. Mackintosh.

[Communicated by Rear Admiral Sir C. Malcolm.]

Although various accounts have been written giving a description of the mode in which the katt, kutt, or catechu, formerly known by the name of terra japonica or Japan earth, is prepared by the people who manufacture it, yet as I have not met with any account of the habits and customs of these persons, I intend to relate in the following pages such information as I am in possession of, respecting them, and the manner in which they prepare the *kutt*.

The manufactures of the kutt are known by the names of Kattoury and Kattkurry; in fact they derive their name from their profession. In the Sanskrit language they are termed Khadira pragharaka;\* Khadira being the Sanskrit word for the Khyre tree (Acacia Catechu) that from which the kutt is prepared; and pragharaka means the extractor of the juice of the tree.

The Kattouries reside in the Attaveessy, and Northern Konkan; they may be considered as nomades to a certain extent, for, notwithstanding they always reside in the same country, yet they frequently change their place of residence. If we are to believe their own account, they have been settled in the Attaveessy from time immemorial. They have a tradition among them, that they are the descendants of the demon Rawan, the tyrant monarch of Lanka or Ceylon, and the same whom the god Rama vanquished, and whose exploits are related by the distinguished poet Valmik. This might lead us to suppose at once, that they came originally from the south. It may be remarked here, that there is a tradition respecting the *Gur-sees*, or musicians, scattered over many parts of the Deccan, which states that they are the descendants of the musicians who attended on Rawan, that they are the original inhabitants of the Deccan, and that the country was a wilderness when they first settled there.

The tribe of Kattouries is divided into four Kools or divisions, the Helumn, the Jadoo, the Puwar and the Sindhy. The Helumn is considered the superior and most respectable division, and the Sindhy is held in least estimation. The families of each division intermarry,

\* खदिर प्राघारक.

although those of the first two affect to have some objections to form matrimonial alliances with the Sindhy one.

The different Naiks or elders of families possess great influence in their respective divisions, indeed they exercise a patriarchal sway over those families—that are, from relationship, subject to their control. The females, it is well known, maintain great authority over their husbands; their temper is in general very violent and untractable; they appear more active and intelligent than their husbands. The men present a squalid and half starved appearance, and are shy and anxious to avoid communicating with other persons.

The Kattouries are an indolent, improvident, and extremely filthy people, both in their habits and in their food. They readily eat snakes, blood-suckers and lizards, also the black-faced monkey, and jackals; in fact, they do not hesitate to devour all sorts of vermin. Yet they will not partake of food prepared by a Dhere or Pariah. They are a most determined race of drunkards! Should one of them happen to pass near a liquor shop, without either money or grain to barter for a dram, he will most likely pawn the only rag of cloth on his person to gratify his appetite, and go home naked, in the hope that he may redeem the pledged article on some future day. Owing to their ignorance and prodigality, their circumstances frequently become very desperate, and they have, consequently, to contend against misery and many temptations to which want reduces them. They have the credit of being great robbers, stealing corn from the cultivators' fields and farm yards, also committing robberies in the villages at night, and plundering solitary travellers during the day. Notwithstanding these vexatious doings, the inhabitants live in such a state of terror of them, owing to their believing the Kattouries to be the greatest magicians and enchanters in the country, that they dread the idea of accusing them openly of the robberies they commit, and most commonly all they do, is to ask the Kattoury Naik to prevent his people molesting the property of the villagers. The female Kattouries, it is stated, are greater adepts in the black art than the men. It is confidently believed, that by their power they can devote any person to destruction who may give them offence, that the men assume the appearance of tigers, bears and monkeys; and the women that of dogs, buffaloes, cats, hens, &c. on these occasions.

During the very hot weather and the rainy season, they remain at home in their huts at the extremity of the villages where they reside

and, while a few of them realize some pyse daily by selling grass and firewood in the bazar, others of them work as laborers for the cultivators, in raising embankments around the rice fields, and digging drains, transplanting and weeding rice, &c. They are paid both in money and grain for their work, occasionally receiving one or two meals a day in addition ; but as they have naturally an aversion to labor, they prefer jobbing or contracting for the work they have to undertake ; they will then, men, women, and children, work from morning to night, and this for several days, scarcely partaking of any refreshment all the time, until they have completed their task. After they have received the reward of their labor, it is equally portioned among all, young and old ; they then return to their huts to enjoy as long a rest as they possibly can, until they are forced again by hunger to assume the task of laborers

When they proceed into the jungles to prepare the catechu, they take up their residence frequently in the sandy bed of a nulla, making holes in the dry sand, where they sleep at night. It is a common practice with the naiks to warn the inhabitants not to approach their encampment without giving previous intimation of their intention to do so. Their object in giving this warning is to prevent the occurrence, if possible, of any untoward event, more especially on account of the privileged character their females maintain. To explain this more fully, it is necessary to state, that one of the extraordinary and peculiar habits of the Kattoury women, is, (although it is now becoming obsolete) that if, on any occasion, they have been seen bathing by a man of any other caste, they will immediately exert their utmost endeavours to seize him, and force him into their own society. I could mention several instances of men now residing with them having been captured in this way. In December 1830, I recollect a bold but unsuccessful attempt being made by one of the Kattourens, belonging to a gang that had come into the Kotool district.

On this occasion a son of Trimbuk *soonar* (goldsmith) of Ghatty, had proceeded to *Seloondy* to collect his *bulotta* \* dues, and on his way home, as he approached the river, he saw four women and a girl bathing. The instant they perceived him they called to him to come towards them. He concluded that they must be some of the Kattoury women from the Peemptry jungles, and determined on avoiding them ; and when he discovered them rushing out of the water, he was satisfied that they had resolved on trying to capture him.

\* Payment in grain for services rendered by the goldsmith to the villagers.

This made him exert himself, and exercise his ingenuity at the same time to escape from them; but the women only pursued him for a few hundred yards, when they appeared disappointed, and returned to the river. However, one of them, more persevering than the others, picked up her clothes, and instantly recommenced the pursuit. The goldsmith redoubling his pace, gained considerably on her, and rushed into the temple of Hunoomag unperceived by her, stripped off his clothes, and then daubed himself with ashes from the censer, and sat down in front of the shrine. The Kattoureen passing presently by, saw him, but mistaking him for a *gossain*, merely asked if he had seen a young man running past the temple. The goldsmith assuming the privilege of his new character, did not condescend to reply, but merely shook his head, and pointed towards the village, meaning, that very likely he might have gone in that direction. The woman entered the village, and after many vain inquiries, she left the place much disgusted; but returned again the following day. The villagers, now determined to defeat her views, persuaded her that the young man must have passed on to some other village without her observing him.

The Kattouries worship the gods Bhyroo, Kalkaie, Bhowany, Bapdeo, Cheerroba, &c. The marriage ceremony among these miserable and uncivilized people, differs from those of most other Hindu outcastes. When the young parties have been engaged, the Bhugut or priest announces the fortunate day and hour for celebrating the nuptials. He does not, however, communicate this information until the deity has condescended to enter into his body, and enabled him, by one of those shaking fits, to convince his audience that he has supernatural powers conferred upon him. After rubbing some turmeric on the person of the bridegroom, a portion of it is forwarded for the use of the bride, and in the evening at sunset, when the friends of both parties have been assembled, the Naik or leader takes the *basking* \* (a chaplet made of paper,) and fastens one on each of their heads; and this completes the ceremony. Some presents are now made to the bride's father, and, as they invariably provide an abundant supply of liquor on such occasions, the moment they have finished their dinner, they begin to quaff copious draughts of the juice of the mowrah, † men and women, young and old, partaking indiscriminately of this, their beloved beverage.

The Kattouries, it is to be remarked, do not eat any of the cate-

chu they prepare; indeed, they are forbidden to partake of it from long established usage. However, they are very fond of a concrete substance, termed by them *Khyre-sar*, which is found in the centre of the tree, and is considered to possess very heating qualities. The Kattouries eat both this khyre-sar and the gum of the tree, to enable them to resist better the cutting effects of the cold easterly winds, which prevail in December and January, while they are in the jungles. The khyre-sar is a substance in great demand among the higher classes of natives. Persons subject to asthma are said to derive great benefit from using it.

The kutt or catechu, is reckoned one of the most valuable of the vegetable astringents. The dark colored kind is said to answer better for medicinal purposes than the white sort, but the people of India who chew the kutt, use only the white. Kutt is extensively used by native practitioners as an internal medicine, and for wounds. Dyers, also *gowndies* or masons, use it extensively; the latter for rendering lime, used in building, more adhesive.

In some parts of the country, in the interior, catechu is prepared from the *Oullah\** tree. It is much whiter, but greatly inferior to that made from the khyre tree. In other places they make catechu from the betel or areca nut.

It is at the commencement of the cold season (end of October and beginning of November) that the Kattouries prepare to quit their huts, and move to parts of the Northern Konkən (the Attaveassy and the country above the Ghauts) where the khyre trees are abundant, and where they experience least annoyance while manufacturing the kutt. I have frequently met them in the small valleys on the eastern side of the Syhadry range of mountains.

A few families proceed under their respective Naiks on these excursions, and they prefer repairing to the jungles above the Ghauts, as they are not so closely watched by the tax-gatherers; for they have to pay a duty of half a rupee for every *taroo*, or fire-place, which they erect for preparing the kutt. Again the proprietor of each *taroo* has to present the Government agent with five pieces of kutt, and the Naik has to present the agent with one moossull, or staff (made of the khyre tree) used for pounding rice. The Patell of the village within the bounds of which they encamp, receives five moossulls and five lumps of kutt from the owner of each fire-place.

The tax levied by the Rajas of Peint, Jowahir and Dhurruimpoor

\* अंबला *Phyllanthus emblica*.



differs considerably. The former receives one and half rupee, five moossulls and five lumps of kutt from each family; the latter receives two and a quarter rupees, &c. But the khyree trees are so abundant in the Dhurrumpoor district, that the tax is paid there with great facility. The Jowahir levies only half a rupee. The Peshwa's Government levied one and a quarter rupee, &c. but this duty has been reduced under the British.

From what has been stated, it will be observed, that many of the Kattoury families act independently of each other in their movements, and in preparing the catechu, which they dispose of in exchange for clothes, grain, &c. &c. to the inhabitants of the small villages near their encampments. However, it is a general practice with some of the merchants of Nassik, Gungapoor, and other towns to engage the services of many of the Kattouries for the purpose of manufacturing catechu. It is usual with these merchants or traders to descend into the Konkan at the termination of the rains. They enter into an arrangement with several of the chief Naiks to proceed with them for the purpose of preparing the required quantity of catechu. The Kattouries are usually in debt to the grain-dealers of the different villages, near which they reside. The traders adjust matters with the grain dealers by paying part, and becoming responsible for the balance of the debt, on the return of the Kattoury to his old residence. The trader being joined by the Kattouries, the latter select a spot where the khyree trees are numerous. The merchant then begins to erect an extensive shed, but as he has only one or two servants and three or four match-lock men with him, he employs the Kattouries to build it. These sheds are so extensive at times, as to cover one or two begahs of ground. In the centre, a temporary dwelling is built, in which the merchant resides, and lodges his supply of stores for the consumption of the Kattouries and his own establishment. The following are generally the articles in store, rice, nachny, ooreed, onions, garlick, pepper, salt, turmeric, cocoanut, cummin, assafetida, salt-fish, ghee, oil, tobacco, steel, arrack (distilled from the mowrah fruit,) various sorts of coarse cloths, &c. These things are disposed of to the Kattouries at very enhanced prices, varying from 50 to 75 per cent. above the value of the articles in the markets of the neighbouring villages.

The Kattouries erect their bhoongas, or huts, around the merchant's shed; and in front of their hut they prepare the taroo or fire-place. They form the fire-place by digging a trench four or five cubits in length and one in breadth, which they cover at the top,

and leave the ends open to admit the air to pass freely through. In the top there are twelve small round holes to receive an equal number of pots.

Before they commence the operation of cutting any billets of wood, they perform certain propitiatory rites, by worshipping one of the khyre trees. Having procured a cocoanut, some sendoor (red pigment) and a little frankincense, they select a tree for their purpose, rub the sendoor on the trunk near the root, burn the frankincense in front of it, and then break the nut; after which they join their hands in a supplicatory position, and address themselves to the tree, asking it to bless their undertaking, and to allow them to prepare abundance of good catechu. Having constituted the tree by this ceremony, a subordinate deity, which they term *Ran Sheo Warria* (Sheo or the god of the jungle,) they divide the consecrated cocoanut among those around them. Each family possessing a fireplace performs a similar ceremony. They make one or two incisions in the trunk of the tree during these rites, but will not cut it down at the time, although some of these are cut down at a subsequent period.

The following day the *Kattouries* proceed into the jungle and examine the khyre trees. They in the first instance strike two or three blows with an axe deep into the trunk of a tree, to obtain a chip from near the centre, and if upon examination it appears to have attained maturity, that is, if it is of a red color, (termed by them *marhy*,) and there appears a white crust formed by the inspissated juice, they are satisfied the tree is a valuable one, and they cut it down. These people have a superstitious dread of bad luck attending their operations, in the event of a person speaking while a tree which they are cutting is in the act of falling, so that many of them preserve a dead silence on such occasions. The branches, bark, and the white portion of the timber are cut away when the tree has been felled, and it is then taken home. The length varies from four to six feet, and as the wood is extremely hard, the cutting of one billet is considered sufficient labor for the day.

The next day, early in the morning, they cut these billets into chips; however, they are careful not to cut more at one time than may be required for the boiling operations of the day, as they think the chips would be too dry on the second day. To enable them more conveniently to cut these hard billets into chips, they drive three pieces of timber, each having forked branches of different lengths, firmly into the ground about half a pace distant from each other, and

the lowest being on a level with the earth, the billet is placed in a sloping position in the forks, and lies quite secure to be cut. The chips are heaped near the fire-place, after which the men take their breakfast, and then proceed to the jungle. The labor attending the boiling process always devolves on the females. The Kattoura's wife or wives (for they sometimes have two or three) when she has finished her own breakfast, kindles the fire in the taroo, and then puts two handfuls of chips, neither more nor less, into each of the pots, (leaving the one at each end empty,) water sufficient is poured in till it rises four finger's breadth above the chips; they ascertain this by means of a small stick marked like a scale, the lines being distant from each other a finger's breadth.

It has been mentioned that there are twelve holes in each fire-place to hold that number of pots, but should the persons composing the family be sickly or old, they will most likely only use six pots; each of these pots will contain about three quarts of liquid. The pots at each end are only used during the second and third stages of the process. When the liquid has been well boiled, and evaporated to a finger's breadth under the surface of the chips, they take the pots successively off the fire, and pour the liquid into one of the empty ones; after it has been well boiled in this, they apply the scale, and if it is ready, they transfer it to the other empty pot. It is boiled down in this pot till it has attained what they consider the requisite degree of consistency, and then emptied into a trough made of the Pangra tree, (*Erythrina crista galli*), as the timber is soft, and readily absorbs water. The women now fill the pots with fresh chips, and the boiling process is thus continued till all has been finished, or evening puts a stop to their labors.

Should the liquid in any of the pots, during the boiling process, take a longer time than usual to thicken, some of it is taken out and put into one of those pots in which the chips remain, and which had just been strained.

Whenever they find the liquid overflow the pot from excessive ebullition, they sprinkle a little bran on it, to make it subside.

When the men return home in the evening, each with his billet of wood, they examine the liquid deposited in the *aull* or trough, and, for the purpose of drying the substance and rendering it more adhesive, they use a piece of old kumlie (country blanket) with which they keep stirring the liquid for two or three hours. They use the kumlie, as the kutt does not adhere to it, and it is left exposed during the night that it may cool and become firm. If after the usual

time they find the kutt continues rather moist, and that it does not appear to possess a sufficiently adhesive quality, they bury it in the earth for three or four days, after which it becomes dark and hard, but the people never eat kutt of this description; it is used by masons, who mix it with lime.

By dawn in the morning the females are at work again; they take the kutt out of the troughs in masses, and place it in baskets, to permit any remaining liquid to run off more freely, and at the expiration of three or four hours, they take the baskets to the merchant. Here they divide it into small lumps about the size of a fig. They give ten of these lumps for a dhubboo.\*

They will sometimes manufacture a sufficient quantity to allow of their disposing of the value of eight or ten dhubboos in one day. However, this depends of course on their exertions, for if they are indolent they will but prepare about half that quantity in one day.

When the Kattouries deliver the fresh kutt to the merchant, it is placed on the ground in the shade to dry, with a quantity of small chips previously scattered over the place, to prevent the earth adhering to the kutt. It takes three or four days to harden; during this time, each of the little lumps of kutt is turned over once a-day, and to accelerate the drying process, each piece is gently pressed with the hand. The kutt must always be dried in the shade, for if it were exposed to the heat of the sun it would dissolve and turn black.

At the time the merchant receives the produce of each day's labor from the Kattouries, after the same has been valued, he furnishes them with such a supply of necessaries, consisting of rice, flour, salt, pepper, onions, salt-fish, tobacco, liquor, and coarse articles of clothing, as they may be in want of.

All these things are sold, as has been before mentioned, at a most exorbitant rate. The amount of the supplies thus furnished, is deducted from the value of the kutt delivered, and whatever balance remains is credited by the merchant, to liquidate the sum he paid, or for which he gave security to the grain dealers below the Ghauts, previous to their giving the Kattouries permission to quit their villages.

The Kattouries thus employed are not permitted to sell kutt to other persons, and the merchant, to guard against any roguery on

\* A copper coin worth about half an anna, and a little less than half a penny.

their part, has their huts searched daily. The heat in the months of April and May is so excessive, that they are unable to continue manufacturing the kutt, as it will not thicken and dry when the atmosphere is very warm.

When the whole supply of kutt has been dried by the merchant's people, it is piled into long heaps or ridges, and previous to its being removed from the jungle to his own house, he deems it necessary to propitiate the goddess *Showany*. Accordingly, a coarse green sarhy, a choullie, some glass bangles, a small toothed comb, and a string of small beads, are placed on one of the heaps of kutt; then some *hullud*, (turmeric) *kōōnkoo*, (a cosmetic prepared from the turmeric) *karunda phunny*,\* *sendoor*, a cocoanut, and frankincense are placed near the sarhy; after which a sheep and a fowl are sacrificed, after the usual forms, at the shrine. While the merchant is busy performing the customary rites, the Kattouries continue looking on, and at the termination of the worship, the Naiks remove all the offerings.

It is said that the merchant reckons that he receives about ten seers of the kutt (of eighty Rupees weight) for the rupee. It is sold to the Naik merchants at six and seven seers per rupee. These again retail it for five rupees the seer (about two pounds). They sell it in the Hyderabad territory for eighty rupees a Pullah of 180 seers. At Amroutty, in Berar, it sells about three seers for the rupee.

Malta, 10th March, 1838.

Signed. A. MACKINTOSH.

# XI. — *Narrative of the late Cruize of the H. C. Brig of War Tigris.* By Commander Igglesden, I. N.

The following is a narrative of the late cruize of the H. C. Brig of War *Tigris*, which at the desire of Sir Charles Malcolm is offered to the Bombay Geographical Society, although from my limited opportunities of observation, it must necessarily prove meagre and imperfect.

In the early part of last March (1836) the *Tigris* was despatched to New South Wales, and Torres Straits, situated between New

\* करंडा कणी, literally, casket and comb; these articles with a pair of glass bangles tied together, form a common votive offering, presented by Hindu females to their idols.

Holland and new Guinea, in quest of the survivors of the ship *Charles Eaton*, wrecked on the outer barrier reefs in the vicinity of Sir Charles Hardy's Island, in August 1834, on her way to India. Our progress down the Malabar coast at this season was much retarded by light winds, which at times were well to the southward. We touched at Cochin to replenish our stock; and at Point de Galle to complete our water, where, from our having a case of small-pox on board, we were subjected to quarantine during our short stay.

We left Point de Galle on the 26th with an intention of visiting the Cocos Islands or Keelings Group, to replenish; but meeting a boisterous S. E. trade in long. 95° E. and lat. 7° S. with a heavy sea, I was induced to make the best of my way, urged by the nature of my mission, for New Holland, although short of water and provisions for a voyage of that length. We carried the S. E. trade to 31° S. when it was succeeded by variable winds; then the usual westerly gales, setting in from the northward at first, and eventually from the south-west.

On the 25th May, we sighted King's Islands on the western side of Bass' straits, and the gale then shifted to the N. N. E. Considering it imprudent to attempt making Port Dalrymple on a lee shore and with thick weather, we bore away for Hobart Town. On the 27th, at day break, we saw the Eddystone Rock, and the high southern coast of Van Dieman's Land. The stormy weather having abated during the night, the view at sunrise was most interesting. The bold lofty mountains, having their summits crested with snow, thickly covered with forest trees, and, owing to a serene sky, standing out in prominent relief! The interesting scenery has been so happily described by Montgomery Martin in his "British Colonies," as to render any future attempt utterly unnecessary. The next day we entered the Derwent.

Knowing the spirit of enterprize which so eminently distinguished the immortal circumnavigator Cook, one cannot help feeling surprise that the majestic estuary at the head of Storm Bay, should have escaped his penetrating eye, and that its exploration should have been left to one of our own officers.

During our stay at Hobart Town, the weather resembled a mild English winter, the thermometer rarely falling below 50°; Mount Wellington was occasionally enveloped in storms. This mountain defends the town from the piercing westerly winds, and rears its hoary head in great majesty.

After spending a few days very pleasantly, and enjoying the salu-

brity of the climate, we quitted Hobart Town on the 7th of June, for Sydney.

On the 9th and 10th, we had to encounter one of the winter storms from the southward, which did some damage to our upper works, and put the qualities of the little Brig to the test. She rode over a heavy and alarming cross sea like a duck, and, with hammocks in the weather main-shrouds, and two storm sails (a stay and try sail) she bravely breasted seas, which at a distance threatened to overwhelm her. We arrived at Sydney on the 12th, when I was informed of the departure of H. M. Colonial Schooner *Isabella*, eight days previously, to Murray's Island, on the object of my mission.

Our repairs detained us four weeks, when, being furnished, through the kindness of His Excellency Sir Richard Bourke, with the instructions drawn up by Captain P. P. King, R. N. for the guidance of the *Isabella*, I left on the 10th of July for Murray's Island.

On the 26th we made the *Eastern Fields*, passing within three miles of the nearest reef, the whole group forming a deep crescent with its convexity to the S. E. and about four miles in length, having no passage apparently between the several reefs. On the northern most, a conspicuous chimney rock was visible at a distance of four or five miles, and, by estimation was about fourteen feet high. The next morning we made the *Boat Reef*, by which we were enabled to shape our course with tolerable precision for Murray's Island, it having been correctly laid down by Captain King, in long. 144° 40' E.

It is indispensably necessary to sight *Boat Reef*, there being no soundings to indicate the approach to the outer barriers, and, as it happened to us, there is a probability of losing the meridian altitude by cloudy unsettled weather. The breakers were first descried; having a fresh breeze, an anxious look-out was kept for the islands, and we had approached within four or five miles of the barriers ere the largest island of the group was seen, shadowing its outline through the cloudy atmosphere, which had hitherto obscured it. The other two were shortly after visible from the mast head, a station which I now occupied. We stood boldly on for the reefs, looking out for a clear opening or channel. At length, finding one that promised fair, we edged away W. by N. and entered between two reefs, the channel being about two and a half cables wide, with the largest island bearing W. by S.  $\frac{1}{4}$  S.

Having fairly entered, we got soundings at twenty-five fathoms; steering according to the direction of the channel from W. N. W.

to N. W. by W. in the narrowest part we had soundings of sixteen and twenty-two fathoms.

At 2 P. M. having quickly cleared the channel, we anchored under a patch of sunken rocks off the northern reef, in nineteen fathoms, red and white coral bottom. It was now spring tides, the ebb setting out the E. S. E. At 3h. 30m. the tide changed and soon set in with rapidity, and, in the space of an hour the reefs were again covered. At sunset all that remained visible was the summit of a sand bank on the southern reef, and the long foamy ridge of breakers on the outer barriers. I intended to examine the reefs in one of the quarter-gigs, and left the vessel for this purpose, but it was as much as we could do to regain the ship, and without making our intended exploration. The next morning we had a moderate S. E. breeze with fine weather; weighed anchor and stood for the islands under easy sail, steering nearly S. W. by W.  $\frac{1}{2}$  W.; the soundings irregular, and the water discolored. The least water, however, was fifteen fathoms, oozy bottom; at times, no bottom at thirty-five fathoms. When the northern and middle islands were in one, at the distance of four or five miles, we had thirty-five fathoms.

At 8h. we rounded the reefs off the large island at a cable's length distance; soundings from twenty to twenty-five fathoms. At 8h. 20m. anchored in twenty-five fathoms oozy bottom, off shore less than half a mile. The small island just shut in with the south end of the large one (Maré\*;) centre of Peaked Island S. by W.  $\frac{3}{4}$  W. Darnley's Island (or Auroob) N. W.  $\frac{1}{2}$  W.

This anchorage is too close in shore for a large vessel, as there were reefs to the northward, within a quarter of a mile, continuing with little interruption to the other two islands, and having no clear passage that was visible from the mast head. Between this line of reefs and Middle, or *Peaked Island*, there may be gaps between some of the patches, but at times I could observe breakers nearly along the whole distance.

Long ere we reached the anchorage, the natives were seen running to the beach with palm branches in their hands, and shouting with the utmost vociferation; they were certainly blessed with good lungs, as their stentorian voices were heard by us when a mile and a half from them. All was now bustle and animation, — launching and manning their canoes, and, ere we had the sails furled, a dozen canoes were along side, the people making energetic demands for

\* The extremes by compass from E. by N.  $\frac{1}{2}$  N. to South.



"Tooree' Tooree," and "Wallee, Wallee," (iron and clothing.) I now triced up the boarding nettings, and then made signs for them to come on board; but as they appeared apprehensive and timid, I went into one of the nearest canoes and prevailed by means of a few presents, on a fine young man to come on board. I introduced him into the cabin, but he clung most tenaciously to my arm for sometime, until I allayed his fears; others soon followed his example, and in a short time I should have had the decks crowded had I permitted it. The boarding nettings being spread, I kept the crowd in abeyance, admitting a few only. I easily prevailed on three of them to take breakfast, first giving them, greatly to their delight, shirt and trowsers each, as all the men were in a state of nature. As may be imagined, I had the task of assisting them at their toilet, for they were much puzzled to adjust their new dress. My guests however did not feel quite at home; this they evinced by shrugging their broad shoulders, somewhat straightened by too small a shirt. We now exchanged names, in token of close alliance and mutual friendship, and my Christian name was echoed by one and all, until I was tired of hearing it. The breakfast was much relished, their politeness not suffering them to refuse whatever was offered, and they only occasionally forgot decorum. When any thing particularly struck their attention, a grin of delight mixed with an expression of wild surprise was exhibited by each of my sable friends.

Whilst at breakfast I was agreeably surprised by receiving a letter left here by the commander of the *Isabella*, brought on board by an old man to whom it had been entrusted, named Dhuppar, the person, as it appeared from the letter, who had taken charge of little Doyley; but before I received this communication, I could understand that the vessel with two masts had taken the child and the other boy away. The following is an extract of the letter, dated on board H. M. Colonial Schooner *Isabella*.

"Murray's Island, June 26th, 1836.

"I leave this memorandum in the hands of the natives, and they promise to produce it to the first European captain calling here. It will be well to return them a trifling present at its delivery, so as to encourage their confidence. My object in visiting this place was to search for the survivors of the *Charles Eaton*, which was lost on some of the barrier reefs to windward. I have only found two, John Ireland and a little boy Wm. Doyley, son of Captain Doyley of the Bengal Artillery; the father, mother, and the whole of the passen-

gers and crew were murdered by the savages, on an island which the natives of this place call Boydaney. The two survivors I purchased from the Natives of this place for axes, which they call Tooree. These survivors have been well treated on this island; indeed these people saved and rescued them from the savages of Boydaney, an island to the westward, which it is now also my object to visit, although I am rather at a loss to determine which it is, as there is no native name on the charts to any of the isles within the Straits. The natives of this I consider very harmless, but great thieves, and very much afraid of a gun or small-arms, &c."

I consequently rewarded the bearer's fidelity by presenting him with an axe, &c. Whilst I was busy in making these arrangements, the servant in removing the breakfast things missed a silver spoon, and as a recompense for my hospitality, it was found secreted in the bosom of the shirt of an unworthy guest. As he was but a lad, and the son of one of the special guests, I endeavoured to impress on the father a sense of the offence which his youngster had committed, and which I am willing to think, he comprehended, as the lad was sent into a canoe, and never after made any attempt to come onboard. A shewy penknife had likewise disappeared; but I was not at all surprised that these children of nature should have but an imperfect knowledge of the difference between *meum* and *tuum*, when in the midst of so many temptations, they might naturally conclude, that we had enough, and to spare. I now proceeded on shore accompanied by Dr. Hughes, with a bag and pockets charged with presents.

On our landing we were warmly greeted by young and old, and soon found our arms locked in those of our new friends, and in this manner we were escorted by a very noisy rabble to one of their bamboo enclosures surrounding some five or six huts. Taking my seat on a large stone, I commenced my distributions. There was no want of applicants, and I was so hard-pressed by the crowd, that it became quite suffocating. The confusion equalled that of Babel, and I was obliged to deal out as speedily as possible, it coming at last to a scramble, during which they assisted themselves without my knowledge to the contents of my pockets. We now took a ramble along the beach, and met the second Lieutenant and Purser, who had taken a passage on shore in one of the canoes. The sun proving too powerful, prevented us taking a long excursion. Opposite to one of the enclosures were assembled a number of women nursing their infants, and basking in the burning rays of the sun. I invited two of my friends on board, and on reaching the vessel I found that an active

barter had been carried on in cocoanuts, bows and arrows, a few shells, and some tortoise shell ; but the market had been well drained by the *Isabella*. Several women were on board, one of whom had been gaily decorated with a silk union twisted into a turban, displaying the taste and generosity of the donor. It is necessary to state, that unlike the men, who go without any clothing, the women wear a cumbrous covering of coarse grass, from the waist to the knees, which gives them a ludicrous appearance. After dinner I again went on shore towards the western end of the island. On my return to the boat, after a second distribution of trifles, to go on board as it was near sunset, a fine powerful islander wished to accompany me, making signs of his wishing to sleep on board. I complied with his request and in return I received his patronymic, of Maddoo, ratified by joining hands.

When we reached the vessel I took him round the lower deck which by this time was lighted up. The Gunner's store-room and the armoury occupied much of his attention. As I wished to take his profile, he readily gave me a patient sitting, and was evidently gratified at his being brought thus into notice. Judging from appearance, this person was between forty-five and fifty years old, and, from his repeating the names of the principal people on the island, and placing himself second on the list of worthies, I presume he occupied that place in the estimation of his countrymen. In common with the majority of the natives, he was tall, and muscular, as regards the upper half of the body, the limbs, however, were disproportionately slender; an open intelligent countenance, hair crisped into short curls, well besmeared with grease and soot; the septum of the nose perforated; body and arms cicatrized, and the lobes of his ears by means of cutting and stretching, nearly touched the shoulders. Making allowance for their wild dishevelled hair and beard, and a peculiar ferocity of countenance, they are far superior in physiognomy to the aborigines of New South Wales, with their flat features, hideous great mouths, and thick lips. The women, however, on Murray's Island are generally most repulsive in appearance, increased if possible by some frightful diseases, elephantiasis and cancer, to which they are subject, producing hideous deformity in both sexes. Their food is simple, consisting chiefly of roasted unripe plantains, roasted yams, with cocoanuts; shell fish, and any other fish, which venturing into shallow water, they are enabled to spear. By raising a rude wall of coral on the reefs, similar to those on the flats in some parts of Bombay harbour, they entrap fish on the tide receding.

Their flesh diet is confined to turtle. We saw a very few rude hooks made of tortoise shell, but I should hardly think they could answer the destined use.

Other particulars which came to my knowledge subsequently to this period, may, for sake of arrangement, be here added. In Flinders's work, the population of Murray's Island (for only one of the group I believe is permanently inhabited) is estimated at 700. This is most certainly overrated, and two hundred I conceive, from my own observation, confirmed by a late statement by Dr. Wilson, R. N. is nearer the truth. Darnley's Island, which is in sight from Murray's, and more extensive, may probably contain more inhabitants, as cultivation is more general there than at Murray's; the sugar cane, tobacco, and yams, forming their staple commodities. A constant and friendly intercourse is kept up between these islands, which gives them a commanding influence over the rest of the islands in the Straits.

The canoes are procured from the southern coast of New Guinea. These they obtain by bartering a species of volute shell, which is much esteemed by the people of New Guinea, and manufactured by them into ornaments. It is but candid to state, that this and other facts, which could not possibly come under my own observation are given on the authority of the lad *Ireland*, one of the survivors of the *Charles Eaton*. The canoes are correctly described in Flinders' voyage, and also the character of the inhabitants of Murray's and Darnley's islands: no form of worship is observed amongst them, although veneration is paid to the dead, and in some of the huts which our officers visited, skulls were seen suspended, which they sometimes incase in tortoise shell, forming an artificial nose, and supplying the eyes with pieces of mother of pearl. In one of the canoes which came along side the *Tigris*, was a rude sculptured head of a man with a hat on, made of wood and painted after a fashion. In their habits the men are averse to labor, and consequently to cleanliness; the women perform the chief labor; but both ply as weavers in making boat-sails from grass.

The marriage ceremony is conducted somewhat *à la Gretna*, for the girl elopes with her paramour, which is resented by her parents and friends on the bridegroom and his party, and after a trial of strength, as a thing perfectly understood, the girl invariably remains with her protector. Bigamy is rare, and even if a family becomes numerous, they are said to strangle the offspring at birth, unless a friend can be found to adopt the child, and give as an equiv-

alent a large shell, bows and arrows, or a bunch of plantains. Immediately on the birth of a child, it is taken to the sea side, and washed, and the mother in a day or two, returns to her accustomed occupations. Owing to the imperfect nature of the chart, or to some error of my own in estimating distance, I got to the southward of the Cumberland Passage, when, the danger of returning appeared equal to that of proceeding. I determined on the latter, threading my way amidst a labyrinth of sunken rocks and reefs, until 4 p. m., when I had to seek an anchorage for the night, and came to under an extensive reef, at a cable's length distance, in twenty-seven fathoms; the largest island of Murray's group bearing N. E.  $\frac{1}{4}$  E. five or six leagues. We had fresh S. E. breezes, and strong eddy tides, the harbour lead of 32 lbs. being swept off the ground by the force of the under current. During the night, finding the vessel kedging we let go a second anchor in nine fathoms, and brought up in eighteen fathoms, rocks. On the following morning I observed the sea breaking over a small spot of discolored water a short half mile to leeward, and dispatched a boat to sound on it. She found three feet water having at the same time seventeen fathoms over the stern. We weighed the best bower with much difficulty, but the small bower chain had become so entangled amongst the rocks, that it resisted every purchase we could apply, and we had finally to slip from it, ere the sun had got too far to the westward, it being of vital importance that the sun should be kept astern to enable me to extricate the vessel from this perilous and unexplored track. Our danger was at times imminent, and nothing but the most vigilant look-out at the mast head enabled us to escape the many hidden perils we had to pass, ere *Half Way Island* greeted my sight from the main top-gallant mast head, at 2 p. m.

At 3h. 45m. we anchored, with the centre of the island bearing S. E. by S. distant half a mile, in seventeen fathoms coral and sand. We lowered the quarter boats, and proceeded with a party on shore to explore. A conspicuous tree bore the words—"Dig under" carved on the bark, and our labor was recompensed by finding the following paper inclosed in a bottle : —

" July 28th 1836."

H. M. COL. SCHOONER ISABELLA.

" Memo."

Half Way Island.

" This Vessel was dispatched by the Government in search of the survivors of the Charles Eaton, wrecked on the barrier reefs about two years ago. I have called at nearly the whole of the islands to

the northward, after finding two of the survivors on Murray's, Wm. Doyley, and John Ireland, a boy of the Eaton, the former a son of Captain Doyley of the Bengal Artillery. Ireland relates the awful catastrophe, having seen the whole of his mates on the second raft, consisting of the crew, murdered in his presence. The Captain and passengers, who were in the first raft, shared the same fate about a week before on the same island, called Boydaney, by the savages of Aurreed, another island in lat  $9^{\circ} 56' 15''$  S. and long.  $143^{\circ} 11' 39''$ . bearing N. by, W.  $\frac{1}{2}$  W. from *Half Way Island*, and seen off the decks.

"After searching all over the Straits for this mysterious isle, I at last found it, but saw no inhabitants there, the people having left on the preceding night, when the ship hove in sight of their isle. I, however, found the skulls of the unfortunate victims on the middle of the island, covered with a kind of shed and arranged near a place, where they generally feasted. The heads were placed round the figure of a man painted with ocre. I observed long sandy hair on one of the skulls; also marks of great violence on them all. Having satisfied myself of the truth of this detail, I set the whole of their houses on fire, and destroyed every cocoanut tree on the place, which those savages generally exist on. I at the same time conveyed the heads on board, and destroyed the skull houses. My next object is to proceed towards *Double Island*, and mount Adolphus, where I may find some other sufferers, and, after performing that duty, I intend to proceed to Sydney, having fulfilled the commission from H. M. Government with which I was honored. Should this fall into any hands, I will feel obliged by their giving it publicity in the first port touched at, in case of any unforeseen accident taking place with us, ere we reach head-quarters." &c. &c.

(Signed) C. M. LEWIS, Comr.

The receipt of this caused me to leave early the next morning for mount Adolphus; steering S. W. the soundings regular, the water losing its clearness, and becoming discolored, of a muddy appearance, assimilating to the oozy bottom. Flinders' chart is here tolerably correct.

At 10hs. 45' we sighted amount Adolphus. At noon the mount bore S.  $32^{\circ}$  W. about three miles distant, in eleven fathoms soft bottom; *Double Island* N.  $65^{\circ}$  W. the York Isles S.  $60^{\circ}$  W. Cape York S.  $50^{\circ}$  W. Keeping a strict look out from the mast head, and not perceiving the least signs of habitations or inhabitants, bore away

and skirted York Islands; soundings eleven and twelve fathoms. Having satisfied myself, that if any human being had been on either of the islands, we should have seen them, I bore away for Double Island, and at one o'clock descried a vessel at anchor, which proved the *Isabella*. At 3hs. 30' we came to, in nine and a half fathoms, sand off the N. E. and a Double Island; the centre of the eastern one S. E.  $\frac{1}{4}$  E.; the western, S.  $\frac{1}{2}$  E. off shore a quarter of a mile.

As its name denotes, this Island has the appearance of two islands, the eastern part rising in a conical form to the estimated height of two hundred feet or more, connected by a low sandy neck (which at times is evidently overflowed) to the western part, which, like all the small islands, is covered with trees.\*

The Surgeon of the *Tigris* accompanied me on board the *Isabella* to examine the skulls; these were forty in number, attached to an imperfect and rude resemblance of the human face, composed of tortoise shell, which was found on the island of Boydaney, known in the chart as one of that group named *Six Sisters*. On examination, fourteen only we found to be of European formation. These were comparatively fresh, whilst the others were much decayed. Marks of extreme violence were evident on the whole of the recent skulls, and principally on the temples. The others might have belonged to the enemies of these people.

It appears that the midnight orgies of these savages are characterized by frantic dancing and shouting, mixed with taunting and insulting language, addressed to the skulls, which in frenzied excitement they take, and, by means of a piece of string attached, whirl round their heads. The relation of their cold blooded cruelty by the lad Ireland makes one shudder, and raises our esteem for the generous and humane conduct of the Murray's. With Captain Lewis's permission, I took Ireland's deposition in presence of Captain Lewis himself, and our first Lieutenant. This has been already published in the *Bombay Courier*.

Why the life of Ireland was spared is a mystery to him. It had been repeatedly threatened, and he had a severe struggle and personal conflict with one of the savages. In wanton cruelty, they would at times make him stand at a distance, and shoot their arrows close to him, keeping him in the greatest alarm and fear. On one occa-

\* At its eastern end we observed impure marble resting on a bed of granite, the latter assuming in many parts a greenish tint.

sion a spear was thrown at him, which entered under the right breast, and striking against a rib inflicted a wound about two inches long. The wound being very painful and having lost a considerable quantity of blood, he, as he says, grew tired of his existence, and came to the resolution of drowning himself. He accordingly swam out some distance from the shore, but the salt water causing acute smarting, in the act of seeking momentary relief by returning to the shore, the design of self destruction vanished. It was not long after this that the news having reached Murray's island of white people being on Boydaney, these people sent one of their large canoes to ransom the survivors, which was chiefly paid in some large bunches of plantains. The purchase had scarcely been effected, then they wanted to get Ireland into their possession again, and no stratagem was wanting; knowing, I suppose, that dead people tell no tales, and having nothing to dread from the infant. On the survivors reaching Murray's island, they were respectively placed with Maddoo and Guffar, and during an expedition made in conjunction with the inhabitants of Darnley's island, against some islanders of New Guinea, the lad and child were left in the care of their wives. It appears they had been eight months on the island when the ship *Mangles* touched there, and from Ireland's deposition, it is a matter of regret, that the master of that ship did not use more discretion, and satisfy himself of the truth of statements before he made them in an official shape. Captain Lewis of the *Isabella*, with a very little address, and a few trifling presents effected their release. The infant had become so great a favorite with the women, that they parted with him with many tears, and the feeling was mutual. The poor little fellow for the first three days was constantly crying, and would awake at night in the greatest terror and agony, continuing to scream until assured by Ireland of his safety. His native name was Yenas, and he spoke the language of the Murray's islanders with fluency. The lad Ireland proving a good interpreter, and thinking likewise that he should recognize the island, where the murderous tragedy had been enacted, Captain Lewis was induced to make a tour around the northern side of the islands, calling first at Darnley's, where the natives behaved civilly.

One old man who appeared to have some authority, was very attentive, and made Captain Lewis a present of a rude wooden figure of a man, which the rest of the natives were unwilling to part with. This idol did not appear to be an object of worship, but at the same time they attributed to it the diseases of cancer and ulcers, to which



they are subject. They possess no idea of a supreme Being; and they imagine that white people have no country of their own, but wander on the ocean in wooden dwellings, which they look upon contemptuously, as being very clumsy and unmanageable.

After leaving Darnley's island, the *Isabella* grounded on a patch of rocks lying off *Canoe Reef*, as laid down in the charts. The breeze being light and the water smooth, she got off, fortunately, for soon after it began to blow with so much violence, that although partially sheltered by a reef, she was riding with two anchors ahead for nearly a fortnight. This will give some idea of the weather even in the fair season, and during the N. W. monsoon, judging from the ravages the sea has made on the N. W. side of the islands, the weather must be very severe. It was owing to this detention that I overlooked the *Isabella*. After finding out the "mysterious isle," as Captain Lewis calls it, the savages left the evening previous, most probably from an instinctive dread, that retribution was sought by the *Isabella*. The idea of pursuing their canoes amidst an intricate navigation, would be futile indeed in a ship, and even in our boats they would distance the fastest pulling gig. Whether it was good policy in adopting the very natural act of destroying the few cocoanut trees on *Boydane*, and burning their huts, which can be erected again in an hour or two, will only eventually be known to any other unfortunate victims, who may fall into their power, although it is probable that it may cause hostility between them and the *Murray's*.

At day break on the 2nd August, I proceeded with the *Isabella* in company, to visit *Wednesday Island*, steering about W. S. W. with the wind easterly, and carrying regular soundings of eight and seven fathoms. At 6hs. 30' discovered a small rocky island bearing N. W.  $\frac{1}{2}$  W. five or six miles distant, which not being laid down in the chart, I named "*Grant's Island*" in compliment to the Governor of Bombay; there is another isolated rock further to the west not noticed in the chart.

At 8hs. 30' we discovered by the aid of our glass, several natives on *Wednesday Island*, waving branches in their hands. At 10hs. anchored off the eastern end of the island in seven fathoms, sand; off shore half a mile, the extremes from E. by S.  $\frac{1}{2}$  S. to S. W.  $\frac{1}{2}$  S.

We went on shore armed, not knowing how the islanders might be disposed. Observing smoke rising from amongst the trees at the western end of the island, from which I inferred their huts to be situated there, I pulled along the beach to the spot, about a dozen natives following the boats, but when we landed they took to the bush.

The Surgeon and myself walked up to the place where they disappeared, and after calling out as loudly as I could, two or three at length peeped out from amongst the trees, but they scampered away again. Thinking that the sight of our arms was the cause of this timidity, I ordered the men to fall back, and giving my gun to the Surgeon, I proceeded alone to their hiding place, where a wild looking savage made his appearance. Having provided myself with the usual trifles, I held out to him a string of large blue beads, when he very cautiously advanced within reach, and snatching them from my hand, ran off with the celerity of a hare. Finding by this that it was necessary to humour them in their own way, I went and sat down under the shade of a tree, the sun being very powerful on the sandy shore. After sitting there about ten minutes, they began to emerge from the jungle, and by more presents held out to them, I enticed them to approach us. I returned on board after an hour's ramble. Small plots of ground had been cultivated, and we met with a remarkable species of dwarf palm, the branches striking out in a spiral manner from the head of the trunk, Ant-hills were here of a prodigious size, some upwards of nine feet high, of an irregular conical shape, inhabited by myriads of large red ants. At 1 P. M. I again visited the shore in company with Captain Lewis and Ireland. This second visit was received with much less apprehension, and after distributing some American biscuits amongst the people, which were greedily devoured, we became tolerably good friends. They showed no objection to our wandering in quest of birds, of which we saw but few.

Captain King's opinion of these people, differs both from mine and Captain Lewis's, for, without exception, they appeared the most ferocious looking savages I ever saw. I studied to win the good graces of a great ugly savage six feet high, and built like Hercules, and another one by no means inferior in his forbidden physiognomy; the latter I prevailed on to part with a mother of pearl oyster-shell, which was suspended round his neck, for a knife and looking-glass: it was amusing to see them viewing themselves in the glass and grinning ghastly smiles. Another disposed of a vulture's feather which he had, by way of ornament, stuck in his hair, and transferred it to my cap. There was another powerful athletic young man upwards of six feet, who had nearly lost the use of a leg, by contraction of the muscles, which had taken place from the shaft of an arrow being imbedded in the thigh. A barbarous custom amongst them is this; when they have transfixed an enemy, they instantly close with him, and, if possible, break the end of the arrow shaft close off; and, as

they are not sufficiently skilled to extract the stump, it remains festering until the wound frequently terminates a lingering existence. It seems that these people have no fixed residence, but roam about from one island to another, in search of turtle, fish &c. They likewise told us that good water is procurable at half a mile distance from the shore. Like the Murray's, and, indeed all these islanders, the men were in a state of nature, and the women wore the dress already described.

Through the interpreter we introduced the subject of the massacre by the people of Boydaney, but they would not understand us, although by their evasive answers, it was evident that they were not ignorant of the transaction, more especially as they had lately come over from that neighbourhood. Towards sunset they became very impatient for us to leave. I endeavoured without success to prevail on one or two to accompany me on board, when, much to their relief, we left them, and reached the vessels at sunset.

The next morning we left early. Following Captain King's directions, we passed within a quarter of a mile of a barren isolated rock, about forty feet high, on which we saw a numerous assemblage of birds of the crane kind. The passage in this part is very contracted, and strict attention to the chart is necessary. At 8hs. 20' sighted Booby Island: at 10hs. observed a pole erected on the brow of the island, and sent an officer on shore, who returned at 11hs. 30' with the report of seven different ships having passed the Straits in safety this season, by entering the barriers in  $11^{\circ} 58'$  S. and making Sir Charles Hardy's Island; this being the track recommended, and justly so, by Captain King, to whom the commercial world are deeply indebted for his valuable labors.

On the 5th we passed Cape Wessel. On the 7th, at sunset, Cape Croker bore S. W.  $\frac{1}{4}$  W. distant six miles. On rounding this Cape, we had the misfortune to get aground on an unexplored shoal of sand and coral, where the vessel was nearly lost, carrying away the false keel, part of the main, the gripe of the fore foot, and rudder. During the next day we worked the vessel by the sails, and reached the anchorage in Raffles Bay. Here I was detained ten days building a new rudder, made from the blue gum tree, which grows in abundance. At this place we had a settlement in 1827, an accurate description of which together with an account of its abandonment, is to be found in the "Narrative of a voyage round the world," by T. B. Wilson Esq., published in 1835. This gentleman was in the *Governor Ready* when she was wrecked in Torres Straits in 1829.

I must say that I was much disappointed in the appearance, though not in the character of the natives of Raffles Bay. They appeared to us disgustingly filthy, and little, if at all, superior to their southern brethren. Nevertheless I cultivated their good will, by trifling presents. The few we did meet, who I may suppose were a fair sample of the whole, were thievishly inclined, and without the slightest idea of gratitude. Some traits of their character which came under our observation would be deemed incredible. I therefore pass these over in silence, and merely remark, that in our unanimous opinion the Murray's are as far superior, morally and physically to these people, as savage life admits. We found in Raffles Bay a place of refuge in time of need, with good anchorage and abundance of wood and water. The few remains of the establishment consist of some palisading, and ruined huts.

On the abandonment of the settlement, the kitchen garden was thriving, live stock was left, and the whole was committed to the care of the natives, who doubtless destroyed whatever their caprice or the more immediate calls of hunger demanded, as soon as the settlers were out of sight. They depend chiefly on cockles, dug from beneath the sand below high-water mark, and some indigenous roots for their subsistence; as for cultivation, they do not dream of it, or aught else that requires the least manual exertion, and as to mechanical knowledge, we had a specimen in a canoe which exhibited a proof of their indolence and ignorance in a remarkable degree; it being composed simply of the bark of a tree with the two ends doubled up. In this imperfect float they had crossed Bowen's Straits; not far, it is true, but I should say that the least ripple would fill the canoe, and that they must depend more on their skill in swimming, than on this clumsy strip of bark, doubled up at each end; thus giving ample proof of their temerity, but little or none of their ingenuity. That we were not visited by more than ten or a dozen natives is inexplicable, for numbers must have been within a few miles, as numerous fires were visible by night and day, extending several miles along the whole bay. On one occasion they found out that some of our native crew were washing their clothes on shore without the usual sepoy guard, when they succeeded in pilfering a few things of little value, and disappeared before our people had the means of retaliation.

On the 17th August, we left Raffles' Bay for Coepang on Timor; thence to Batavia, and eventually to Bombay.

**XII.—*Report on the Inundation that occurred at Surat on the 28th of August, 1837.* By Lieutenant G. Fulkjames.**

[Presented by the Right Honorable the Governor in Council.]

The state of the weather prior to the late inundation of the river Taptce, was, for the monsoon, any thing but boisterous, neither had there been a very heavy fall of rain in the country near Surat; and during the time, the flood remained in the city, the inhabitants who were obliged from the low situation of their houses, to seek safety on the roofs, suffered little inconvenience from bad weather. Very heavy rain must, however, have fallen to the eastward and in the range of Ghauts that separate Khandesh from the low country towards the sea.

The late fresh commenced rising on the 28th of August. It was during the day time, that a small rise was perceptible in the river, and this gradually increased towards night, when it rose very rapidly until Wednesday, when the water attained its greatest height. It remained nearly 24 hours stationary. On the night of the 31st between the hours of 10 and 11, a part of the wall of the city, between the Ontwa and Mujoora gates, gave way with a tremendous crash; a breach was effected, and the wall destroyed to the extent of upwards of 200 feet. The whole road-way in front of this breach has been excavated to the depth of 12 and 14 feet, and completely washed away.

This inundation took the same direction as those of former years, the great body of water coming across the country from the river near the village of Phoolpara, whence, from the formation of the ground to Surat, a distance of 5 miles, the great body of water sets on the town-wall, between the Delhi and Surrah gates, and has more than once destroyed it. In the year 1822 this wall was broken down by a flood, and this year it has given way at the very same spot.

The ground between these two places is very much intersected by hedges, inclosing gardens, which being remarkably strong, must offer great impediment to the stream, and, one would imagine, prevent the water acquiring any very great velocity. The wall at this spot, is broken short off at the foundation.

The moment this wall gave way, a very rapid and alarming increase of water took place in that part of the city nearest to the breach, the water having risen some feet higher than was ever known; while on the western side of the town, the water was lower than in the great flood of 1822, by some inches.

The maximum height of the water in the river, above its average level, was 37 feet. In some parts of the city there were 16 feet of water; but to show fully the extent to which the city was flooded, I beg to annex a memorandum of the height at which the water stood at the different gates of the city; as also in some of the Poorahs.

Outwa Gate .....	7 feet 1 inch.
Mujoora, ditto .....	5 „ 4 „
Jafferally ditto .....	4 „ — „
Newsary ditto .....	2 „ 8 „
Varriow ditto .....	12 „ 9 „
Kattargaum ditto.....	10 „ 7 „
Lall ditto .....	3 „ 3 „
Delhi ditto.....	4 „ — „
Surrah ditto.....	5 „ 7 „
Sallabut ditto.....	4 „ 1 „
Maun ditto.....	6 „ 8 „

*In the Poorah.*

Gulleh Mundavee.....	2 feet
Toonkee.....	16 „ 7 inches

*In the Tann.*

Castle Esplanade.... 6 feet 3 ..... inches.

With regard to the extent of country over which the inundation extended, I can get no positive information; but from what I have collected, and the observations I have made, the breadth of the stream could not have been under 6 miles, and in many parts of the country, double that breadth. There is a very prevalent report among the natives that the Nurbudda and Taptee rivers were joined, when the flood was at its height, which, if true, would increase the breadth upwards of 40 miles.

The nature of the destruction effected by the flood was of two kinds, one caused by the actual force of the current, and the other by the foundations and walls of houses giving way from absorbing water.

A very large number of houses of the poorer classes of the inhabitants of the city are built of wood, the posts of which from the ground getting quite soft, in many places sunk. In others, the force of the current was sufficiently great, in many of the streets to incline the houses so much out of the perpendicular, that the whole came down, and, in many instances, with the wretched inhabitants sitting on the

roofs with all their moveable property, as the only place likely to afford them protection against the devastating effects of the flood, and which must have caused the loss of many lives.

According to the most accurate accounts, not more than 18 lives were lost in the city of Surat and suburbs, and about 300 head of cattle. The force of the current was such, that the bridges over the outer ditch were nearly all destroyed, and the public roads very much injured, and, in many places, completely swept away. In the streets of the city, well manned boats could barely make way against the stream, and in the river it was quite useless attempting it.

The wall of the city has been injured to a great extent. It first gave way between the Delhi and Surrah gates; then a breach was effected in the parapet wall between the Varriow and Kattargnaum gates; the third point was between the Outwa and Mujoora gates, and occurred at the time the water was at its greatest height; and lastly the whole from the custom house to the castle, including some public buildings erected on the wall, used as the Parsonage and Custom house offices.

In the first case the whole wall was overturned into the city by the pressure of the water setting against it, from the direction of the village of Phoolpara; in the second, the parapet was washed away by the velocity of the stream rushing over it; in the third, the pressure of the water behind the wall forced an opening through the soil on which it was founded, apparently having commenced in a small drain under the wall, that had existed from the time it was built, and rushing through the opening with immense velocity soon completely undermined it, and created a hollow under the foundation, in some places 14 feet deep, the wall afterwards falling in for want of support. In the last, the wall was thrust bodily into the river, by the soil at the back of it getting saturated with water.

There is also another cause that may have effected the breach between the Outwa and Mujoora gates, viz:—the gates of the city being shut, the rush of water was so great that it was found impossible to open them. That this did in some measure keep the water higher, and for a greater length of time, in the city, is fully borne out by the fact, that the moment this part of the city wall gave way, the water decreased very rapidly, while prior to this event, the water had remained stationary for 24 hours.

The quantity of matter brought down by the river in the shape of timber, reeds, bushes, parts of houses &c. was very great; little, however, was deposited on its banks; but, owing to the strong S. W

winds and surf setting on the beach at Domus, this was covered to the extent of  $1\frac{1}{2}$  miles, and in many places nearly five feet high, with trees, bushes, reeds, &c. Among this mass the bodies of deer, cows, bullocks, and buffaloes, were imbedded, and an immense number of snakes, some of them of a very large size.

I found on examining a quart of the river water, many days after the flood had passed away, that it held in suspension no less than 5 grains of earthly matter. The quantity therefore, of alluvial matter held in suspension during the flood, must have been enormous. From an inspection of the face of the country, over which the flood had passed, it appeared to me that the current must have been sufficient to prevent any considerable deposit, while in the city itself, both in the streets and houses, the mud was in some places two feet deep.

It appears to me somewhat extraordinary, that scarcely any of the alluvial matter held in suspension by the water was deposited with the trees, bushes, &c. above alluded to; the principal deposit having taken place on the Delta, between the Domus side of the river and Vauxes' tomb. This Delta has been forming for many years; it commences about a mile above Domus, and previous to the late fresh, had a deep channel between it and the banks of the river on either side. It consisted of a number of small islands, between some of which, boats could cross from Domus to Vauxes' tomb even before high water; but since the fresh, the whole of the islands have been formed into one bank, many miles in length, and the channel on the Domus side has been nearly filled up, while on the tomb side, called the Toddy bank, where vessels used to lie high and dry, waiting for the tide to cross the bar, there is now sufficient water to float them at all times.

That a very considerable deposit of alluvial matter does take place in the river, is borne out by the facts, that numerous sand banks are formed, and that the river is now shallower than it was in former years. That this deposit will go on increasing, every year appears to me beyond a doubt; and likewise that the filling up of the bed of the river, and the numerous sand banks that have been formed, are, in a great measure, the causes why the floods of late years have been more destructive to the city than formerly.

It may be proper to mention, that formerly many of the streets of the city and suburbs of Surat, were 20 feet below the level of the floors of the houses at the sides, and that many of the native inhabitants have an idea that filling them up, in some places to the extent of 20 feet, has caused the water to rise much higher in their houses



than formerly. Others attribute it to the filling up of the main ditches of the city with all the filth, &c. thrown out of the town, which nuisance has been increasing ever since the English had possession of Surat.

Their argument is, that these ditches and deep lanes acted as so many drains to draw off the water from their houses, thereby protecting their property; and should this be the case, the great outlay that has been made to fill up these streets instead of proving, as it was meant, a benefit to the inhabitants, has in fact been the very reverse.

The bank of the river called the Toddy bank is 10 feet high, and nearly perpendicular. A section of the strata of it shows very fully the numerous changes that have taken place, and the manner in which it has been formed. It is composed of alternate layers of sand and clay, as regular as if they had been deposited by human aid; some of the layers of clay vary in thickness, owing to the deposit from the freshes being less at one time than at another. The layers of sand however are nearly all alike. A section of the bank near Surat, shows that it has not been formed in the same way, for the upper stratum, to a depth of 3 or 4 feet, consists of black earth, below which a bed of moorum appears as far as the river will allow it to be observed.

The reach of the river from Randier to Surat has altered a good deal. A sand bank has been formed from the Peers tomb (Gabunsa) the whole way down to the Custom house, leaving a back water 10 or 12 yards wide and 12 feet deep, from the Custom house up to the Daria Mahel. Should this bank go on increasing it will save the castle, but otherwise I consider it in a dangerous situation. A large piece of the lower part of the northern angle of the saluting battery has been broken away, which allows the water to find its way under the foundation. Below this, the small remaining portion of the wall of the Dutch *bunder* has also been greatly injured.

Having now related all the circumstances attending the late fresh, that I thought might prove interesting, and having detailed all the information I have been able to collect, I beg to allude to those points on which I conceive attention is most required, and to suggest such measures as appear to me most likely to ameliorate the existing evils.

I beg to enclose a plan\* of the country about Surat, which, as

\* No plan accompanied the copy of this Report presented to the Society. — S.

many names of villages and places are alluded to, with the precise situation of which the Right Honorable the Governor in Council may not be conversant, will, I conceive, tend to explain many points that might otherwise appear obscure.

It is very evident that the filling up of the river near its mouth, must, during any fresh, retard its exit into the sea, and thereby cause it to rise higher for some miles above its mouth. By a consideration of the foregoing facts and inspection of the plain, it appears likewise evident, that during late fresh, the river having risen above the level of its banks at the village of Phoolpara, the direct distance from that point to the city of Surat being far less than along its natural course, and the slope in that direction being consequently greater, having once overflowed its banks, rushed with great force against Surat, the nearest point where it could again unite itself with the stream. It is therefore probable that if any means could be devised to protect the bank in this place, or to divert the current after overflowing it in a different direction, the force of water would not be sufficient, even if it rose to a great height, to breach the wall. But as long as the whole force of the stream is directed against this one point, which under similar circumstances has now been twice breached. Surat will, I feel sure, always suffer.

The first object then appears to me to be to provide some means for the water to disembogue after it has risen to such a height, that the river would otherwise begin to overflow, and, from a careful inspection of the country, it has occurred to me, that a nullah, branching from the main stream above Phoolpara, might by throwing up an embankment to direct the stream into it, and by making a cut for the same purpose, be made to effect this object most completely.

It may be urged against the suggestion, that drawing off a large body of water by this mode may accelerate the filling up of the river. I am of opinion, however, that if it be possible to confine the water within the bank of the river it is more likely to be scoured out than by allowing it to overflow the surrounding country, and thereby collect material which is ultimately deposited in the river, the evil most to be avoided; for the matter that is held in suspension, is, as far as I have been able to ascertain, much greater in the water that overflows the surrounding country than in that of the river itself.

The next precaution that appears to me most requisite, is to afford an opening for the flood to escape, in case the town should be again flooded. Besides the many suggestions for the attainment of this object, already, I believe, before Government, I would propose that the

gates on the western side of the city be made to open outwards, by which alteration the water would at once burst them open, instead of, as at present, keeping them shut.

With regard to the river-face of the city, which as above described has been destroyed nearly the whole way from the custom house to the Dutch bunder, very active measures appear to me necessary. I would suggest, under the impression that rebuilding it with masonry is out of the question, on account of the expense, that it be rivetted with piles and planking, in a somewhat similar manner to a small portion belonging to the Borah Moolaa, which has been thus secured, and which, although the wall of the Dutch bunder below it has given way, is still standing. Above the custom house, as far as the Duria Mahel the wall still remains, but the lower part has been considerably worn away by the rush of the water during freshes, and I am confident, that unless some precaution is taken, it will also be destroyed, and, with that view I would suggest that a similar *rivetement* be also erected in front of it, but only of sufficient height to protect the injured part.

It is probably well known to Government that the river immediately opposite Surat, now flows in a totally different course to what it did formerly. In front of the whole face of the city, a road-way, and in some places, gardens existed, while at present the deepest part of the river is close to the walls. On the opposite bank, soil has been deposited, until it now projects beyond its former boundary, fully as much as the river has encroached on the Surat side. Any person acquainted with the action of strong currents in rivers can, by inspecting the plan easily understand the cause of what has taken place; and the whole theory of the subject is so well known to engineers in England, that various modes have been effectually adopted to counteract the effect of currents. There is, however, one difficulty in the present instance not met with in England. I allude to the enormous rise that takes place during the freshes, which as above mentioned sometimes is as much as 37 feet.

The system most commonly adopted in England, is to throw out a jetty of some description, so as to cant the stream from setting on the opposite shore. None of the plans, however, that I have seen appear to me suited to the river Taptee, for unless the projection, whatever it may consist of, be raised so as to be nearly on a level with the surface of the water at all times, its usefulness would be greatly diminished. To raise any work of this description to the height of 37 feet above the ordinary level of the stream, appears quite out of the ques-

tion, but I conceive a plan might be adopted of forming a floating obstruction, that would answer every purpose, and be executed at a trifling expense. I would propose to float two strong chains either by buoys or casks, stretching them apart at a distance of about 8 feet by lashing them to pieces of timber; I would moor these chains by means of heavy moorings (old guns would probably answer every purpose) from the shore into the stream, in the direction required, and keep the chains perpendicularly over each other by means of guys. I would then connect these chains together with ropes or small chains, so as to form a kind of network in which I conceive all bushes, grass, &c. &c. brought down by the stream would become entangled, and offer an obstruction sufficient to divert entirely the set of the current.

The advantage of this plan is, that any chain in store might be made use of for the purpose, and, if not found to answer the desired object, or, after the object has been accomplished, may be returned back without having become depreciated in value.

In conclusion, I beg to state, that not having arrived at Surat until some days after the late fresh had passed off, and having again left it before any official notice had been received by the Collector of the damage and loss of property, that had been sustained by the inhabitants of the villages on the banks of the river, or even of the number of lives lost, I have been unable to enter so fully on the subject, or to afford so much information as I could have wished; I therefore trust every allowance will be made for what may appear to have escaped my observation.

Signed, GEO. FULLJAMES.

BOMBAY, }  
17th January, 1838. }

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XIII. — *Remarks on the Endian (Tab) River. from its mouth to a Town called Koot.* By Lieut. F. Whitelock, I N.

[Communicated by Rear Admiral Sir C. Malcolm.]

The entrance to this river is in lat.  $30^{\circ} 4' 30''$  N.; it is accurately laid down in the charts of the late survey.

It is difficult to find, as there are no landmarks to guide you; you must be acquainted with the soundings, to find the entrance. From Bushire, boats steer in a W. N. W. direction, carrying 5 or 6 fathoms from Ras Shut. Keeping in this depth of water, you will be

about 5 or 6 miles from the coast. Off the Khore of Barekhan, you will lessen your water to  $2\frac{1}{2}$  and 2 fathoms : you steer then about S. W. and south, altering it as your dep.h of water will guide you.

In this Khore you have from 2 fathoms to  $1\frac{1}{2}$ ,  $1\frac{1}{4}$ , and 1 fathom, high water. This Khore leads into the Khore of Endian. The Khore of Endian extends out about  $1\frac{1}{2}$  or 2 miles from the river : you will be steering, when you enter this Khore, east and E. N. E. carrying from 1 to  $1\frac{1}{4}$  fathoms. The hills called Kulaat, the nearest range, bear about N. E. by N. The distant hills behind Kulaat which are higher, and are called Zaitoon, bear from N.  $\frac{1}{2}$  E. to E. by N.

Formerly there was no difficulty in entering the river ; but of late the bank off the entrance has greatly increased, both in size and extent ; it is of soft clay, with bulrushes growing on it.

The banks of the river at the entrance, are covered with bulrushes for about two or three miles : no other vegetation.

At a place called Nukl Bugosh, (see chart,) there are one or two date groves. At low tide the water is sweet here, but a little brakish at high. There are a few low built houses, and a little cultivation. Two miles from this is another date grove, but none afterwards until you reach Endian town, nor any signs of vegetation with the exception of a few tamarisk trees.

From the entrance you have  $2\frac{1}{2}$  and 3 fathoms low water, as far as Guz Ally, at this time of the year, viz. September.

The banks for some miles are low and covered with a layer of salt, but gradually rise in height from a village called Annonat to the town of Koot. At the village of Guz Ally they are about 8 feet ; at Endian town 14 feet ; at the town of Dehmulla 20 feet, and at Koot about 25 feet. There is no vegetation on them from Endian town to Koot, except a few beds of water melons.

The rise and fall as far as Guz Ally is 10 or 11 feet, spring tides ; water is sweet and very clear, the bottom hard mud.

This river is about 200 feet wide at the entrance ; at Guz Ally not so wide, but at Endian town only 180 feet, at Dehmulla 150 feet, and at Koot not more than 100 feet.

In April, May, June, and July, they say, that when the water comes from the hills, it overflows the banks 15 feet high.

There is plenty of fish in the river, one in particular of about a foot in length, which sticks to the bottom of the boats, and causes them to leak. Unless you are very careful in examining the well off-ten, it is probable that all your cargo and goods will be spoiled in one

night. I had several things spoiled during a night, and found early in the morning the boat half full of water.

The country as far as you can see, wears a desert appearance, destitute of all vegetation; the cause, I imagine, is the saltiness of the soil, or the difficulty of irrigating it, as the banks are so high above the river.

In the interior they cultivate a great quantity of wheat, especially at Baibaun; also water melons. The seed of the marsh melon has been brought from Shiraz and sown here; they are of excellent flavour. There is some good pasturage in the interior 2 or 3 miles from the banks. The cattle appear to be in good condition, such as bullocks, sheep, and goats, &c.

In this country near the river, the soil only produces rice and wheat, water and marsh melons; at least these are the only articles they cultivate. I saw no fruits.

The climate from all accounts is good and salubrious. Sickness is seldom known. North-westers are the prevailing winds during the hot months, and are very hot and dry.

In September they are cool and pleasant. The only disease I heard of was the *berri-berri*, exactly I believe, of the same nature as that of the Red Sea. Most who have had this disease have died of it. Their doctors recommend camel's milk as a cure, if taken when it first makes its appearance; but the difficulty is in their not knowing the disease in time.

The inhabitants are a mixture of Arabs, Persians, and Bedouins. The Arabs are of the Chab and Shireefat tribes. The Persians are of a tribe called Khoyeh.

The Bedouins \* are of a tribe called Yrak Turki; they speak only Turkish, and possess large herds of cattle and flocks of sheep; all of them who are not servants, or do not acknowledge the authority of the Arabs, pay a stipulated sum for the land on which they pasture their cattle, so much for each head.

The whole of this country is under the sway of the chief of the Chab tribe, who resides at a town called Felyah, two days journey in the interior. They possess all the country near Mohumra, Bussora, &c. Shaik Jabber, at Mohumra, is the next in power among them. It is a powerful tribe.

At the town of Koot, the inhabitants are exceedingly ignorant and

\* The author must here mean *Illiat*s, not Arabs. Yrak يراق will be found in Niebuhr's list of the Turkoman tribes.

wild. Few of them have ever seen a boat, and they appear to know of other places than Bussora and Bushire.

When I visited their town, they appeared very curious to know the reason of my coming, and began to conjecture what could be the purpose of my visiting them. One said, it was to take away the money said to have been left by the Portuguese, when they vacated the country. They have a story, that when the Portuguese left this country, they buried under a very large stone all their money and goods; and they add, that they have often tried to remove this stone, but could never succeed. To effect the removal of this stone some attributed my coming. One very old man said, with the greatest gravity possible, that I had come there on no other account, than to take away the Philosopher's stone buried on the Zaitoon hills. They have a great number of traditions concerning these hills, and from their accounts of them, they must be very interesting to a traveller. I was very sorry they would not allow me to visit them. At Koot they say, that in digging among the ruins of the houses of the Portuguese, they have found several boxes containing money, ornaments, and goods; also some skeletons, supposed to be Portuguese.

At this place they attacked and plundered me, in consequence of the different reports which had been circulated of my being possessed of much money. It appeared afterwards that they obtained permission from the sister of their chief; having reported to her, that I was exceedingly rich, and that my intention was to come and plunder them of the money abovementioned. She reluctantly consented, but made them promise not to injure any of us. I had a deal of trouble with them the day before, in order to get permission to proceed further on horseback, and on this morning had determined to return. I had not proceeded half a mile when I perceived a mob following us on the banks. When they came near us, they commenced firing a matchlock or two, and commanded us to stop. We were under sail, and would have escaped, but unluckily the boat grounded at a turning of the river, and before we could get her off, they reached us and commenced pelting us with a shower of hard mud. It was with difficulty that I hindered the boatmen from returning it. We had only one matchlock in the boat, and it would have been madness in us to attempt to defend ourselves against 50 or 60, some well-armed. They continued pelting us for about 10 minutes; luckily no one was seriously injured. When they saw that we made no resistance they boarded us, and commenced plundering. It was surprising to see how soon they made a clearance of all our goods. I think

they were only 5 minutes about it, taking no notice of any of us; afterwards they returned some of my things from a fear that some notice would be taken of the matter, and allowed us to turn back.

Unluckily at the time of my visiting these places, all the Shaiks and principal inhabitants were absent, assisting Mirza Munsoor Khan in retaking Baibaun, (Bebahan,) and the men left in charge possessed little or no authority. From the notice that was taken of this affair afterwards, there is every reason to believe, nothing of the kind would have taken place if their Shaiks had been present, as I was under the protection of Shaik Jabber of Mohumra. But the lower classes are very wild and ignorant.

The inhabitants are very poor; they chiefly subsist, on milk ghee, a very coarse kind of rice, and wheat cakes. Dates and coffee are a great treat to them, few being able to purchase them. Few boats proceed further up the river than the town of Endian.

Cattle are numerous in this country; the bullocks have the hump, but are not very large. The sheep have the fat tail, and are in very good condition; the goats are shaggy.

Their donkies are small, but undergo hard work. they resemble those of Oman, both as to size and strength. Their horses appear to be miserable hacks, and ill conditioned.

They possess very few boats: in fact, I believe, they have not more than one or two at Endian. Their trade is very inconsiderable at present, but formerly they say there was a great deal. They assign as a cause of the decline of their trade, the increase of the bar off the entrance, which will not allow of large boats entering, although there is plenty of water in the river.

They trade chiefly with Bussora, Bushire and Bahrein.

The chief articles of trade are dates, coffee, sugar, fruits, and Indian goods from Bussora. Wheat is the article they give in exchange. The revenue is collected chiefly from exports and the ground tax.

This river is said to wind back again from Koot to Chimteng, and from thence to the hills of Zaitoon; its source is at a place called Ascarie. They say that two waters meet and flow into this river, one sweet, and the other salt. I could not ascertain where these waters came from.

The low range of hills called Kulaat is two fursungs from Chimteng, bearing east. They take their name from the resemblance of a fort on the top of the highest part. The Portuguese are said to have had a settlement here; the ruins are still visible. There is an



excavation here, which from the accounts given of it, I should imagine to have been a place of worship.

The coins current in this country are chiefly Koroonies and Del-lars.

The principal towns are Endian, Chimteng, Dehmulla and Koot ; but they scarcely deserve the name of towns, consisting of a few miserable, low houses built of mud with a tower or two. The current or stream runs about  $1\frac{1}{2}$  or  $1\frac{1}{4}$  mile per hour at this season. Flood tide reaches as far as Guz Ally.

The boats that come up this river are from 20 to 30 tons. But they cannot go further than Koot now, as the water is low, and there are several banks reaching across the river.

#### *Khorc Barmasheer.*

This khore is about 3 miles from the town of Mohumra to the eastward ; it is opposite the Karoon river, and leads to the sea to the eastward of the Euphrates.

At this season of the year, (September) there is little water in it, in some parts not more than 5 or 6 feet. Very few boats come up or go down it, although I believe the steamer Euphrates went up and down a month after the date of my visit.

It is accurately laid down in the new charts. The surrounding country is possessed by the Chab Arabs. Their head Shaik named Taamur resides at Felyah. There are several ruins on the left bank, which are said to have been large towns formerly. There are date trees on its banks for 15 miles below Mohumra ; thence the country assumes a most dreary and barren aspect, and the water becomes brackish.

The tide runs in September about 1 mile per hour. The bottom is soft mud ; this khore is about  $\frac{1}{4}$  of a mile in breadth.

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#### **XIV.—Hints for Collecting Geographical Information. \***

##### **1. Aspect.**

1. What is the general aspect of the country ?
2. Mountainous or hilly ?—Sharp peaks or rounded outlines ?
3. Of the coast ? Abrupt or shelving ? Rocky or in cliffs.

\* Communicated in a printed form by the Secretary of the Royal Geographical Society.

4. Downs of sand? Low or flat?
5. Any active volcanoes? or traces of extinct ones? or their probable forms in the outline of the mountains?
- 6.

## 2. *Surface.*

1. Is the surface level or undulating?
2. Has it a tendency to table lands, or steppes?
3. Is the soil rich or poor? loamy—sandy—boggy?
4. Are the plains fertile or barren? wooded or cultivated?
5. What its general capabilities?

## 3. *Physical Divisions.*

1. Note the chief divisions of the country.
2. Mark especially the line of separation of waters.
3. Trace the outlines of the principal basins of the chief rivers.
4. Group the country into basins as far as practicable; it will be found the simplest mode of describing it.
5. Trace also the limits of the secondary valleys comprising the tributaries to the main stream.
6. May they from position be called upper and lower basins?
- 7.
8. Do distinct tracts of mountainous—hilly—flat—wooded—jungle—cultivated—sandy—marshy or barren, country exist? if so, note their limits generally.
- 9.

## 4. *Mountains.*

1. What the direction of the chief range, or ranges?
2. What the general form of outline? (Describe while in sight *not* from memory.)
3. What is the *estimated* height (if no measurement can be had) of the chief points; and also of the general range?
4. Are any of them snow-capped? (State the season.)
5. How far down does the snow extend? (Note north or south side.)
6. Are they wooded?—At what height does the wood finish?
7. At what height does vegetation cease?
8. Are the mountains in groups or masses? or detached?
9. Obtain bearings, by compass, of the limits of the range, and of all remarkable points, masses, gaps, &c.
10. Mark the chief mountain-passes, and note if they might be easily defended against an enemy.
11. What their general structure?
- 12.

### 5. *Rivers*

1. What are the native names of the chief rivers?
2. Trace the general course of each; with its windings, if possible.
3. Does it receive many tributaries? note their names in order, from its sources, distinguishing on which side they join.
4. Is it navigable for large or small craft? and to what extent?
5. How far up does the tide reach? Is the current rapid? What its rate?
6. Does it flow by several outlets, or by one grand mouth to the sea?
7. Does it form a bar, or banks, or islands at its mouth?
8. What the width of the river at its outlet? and at various points?
9. Is the river ever fordable? Name the chief fords.
10. Does it form cascades, or rapids, or occasionally inundations?
11. Does it at any season lose itself in sand, or otherwise not reach the sea?
12. Does it flow from a lake, or from other sources or springs?
13. What may be the probable elevation of its source above the sea? measured or estimated?
14. Is the bed of the river gravel, sand, or mud? Does it bring down much detritus?
15. What the color of the water? Does it retain it at any distance from land.
16. Is the river obstructed by islands, shoals, rocks, snags, or any obstacle to steam navigation?
17. Are its banks wooded? Is fuel easily procured?
18. Does it abound in fish? and in what species?
19. Is it navigated by native boats? and how far up?
20. Describe each affluent as a main stream, with its tributaries, marking the position of junction, and the angle at which it joins its recipient.

### 6. *Lakes.*

1. What the native names of the lakes?
2. What is the situation and extent of each?
3. What its level above or below the sea? How ascertained?
4. Is it formed by rivers or springs? or does it feed any river?
5. Is it of salt or fresh water? Is it said to rise and fall periodically?
6. What its general depth of water?
7. Are there any vessels or boats upon it? and of what size?

8. Are its banks rocky and steep, or low? Are they wooded or barren?
9. Could fuel be readily procured? Does it offer facilities, or the contrary, to steam navigation?
10. Are its shores thickly inhabited? Are birds, fish, shell-fish, &c. plentiful, and of what sort?
11. Are any marshes or ponds known, and where? Are they constant, or periodical?

#### 7. *Sea Coasts and Ports.*

1. Does the coast form gulfs, bays?
2. Promontories, peninsulas, capes, low points, &c.?
3. Is it abrupt, bold, rocky? or low, flat, and shoal?
4. Are there currents along the coasts? Note their force and direction.
5. Name the chief ports. Are they secure harbours, or only open bays, or roadsteads for anchorage?
6. What the depth of water, and what bottom for anchoring?
7. Is the port capable of containing many vessels? Does it offer facilities for repairs?
8. Can water, provisions, and fuel be easily procured?
9. Note the time of high-water at full and change of moon, and the rise and fall of tide; and direction and velocity of stream.
- 10.

#### 8. *Volcanoes and Mineral Springs, &c.*

1. Are any now active? or, are there traces of extinct volcanoes?
2. Give their position—height above the sea—and native names.
3. Does tradition or history record any eruption? at what date?
4. Was the eruption of fire, lava scoriæ, water or mud?
5. Are earthquakes frequent? Are there records of any having occurred?
6. What were their effects? how far did they extend? any upheaving or depression of land recorded?
7. Are any *mineral springs* known? Hot, tepid, or cold? (Note the temperature if possible). Are their waters used medically?
8. Do they form deposits? Siliceous or calcareous?
- 9.
- 10.

9. *Maps, Charts, &c*

1. Do any charts of the coast, or maps of the country, or partial surveys, exist? Native or otherwise? What their respective dates?
2. Are they believed to be accurate? Upon what scale?
3. Endeavour to map the country, starting, if possible, from a fixed point; if exact observations cannot be obtained; give compass bearings, and estimated heights and distances. (N. B. Heights may often be obtained by length of shadow, &c.; distance by velocity of sound, &c.) The scale of one inch to a geographical mile is recommended.
4. Take bearings of all remarkable objects in sight from any known station, as mountain-peaks, passes, gaps, towns, villages, forests, &c. &c., and transfer all to paper immediately; trust nothing to memory.
5. Preserve all original observations and documents relating to surveys; and make two or three copies of observations.
6. Obtain correct *native* names if possible, and keep to one standard of orthography. Mark all hearsay information with the initials of the informant. If a journey is made by night, or in foggy weather, trace it with colored ink.

10. *Astronomical Observations.*

1. Are any positions astronomically determined? What reliance may be placed on them?
2. It is very important to obtain observations for the position of all capes, headlands, points, towns, villages, &c.; mountain peaks, passes, limits of range, &c.; lakes, sources, confluence and outlets of rivers; in short, of every remarkable object.
3. Endeavour to obtain the *latitude* by meridian altitude of the sun, or of a planet, or of a star, or of the moon.
4. *Longitude*—by eclipses of Jupiter's satellites, especially by eclipses of the third and fourth satellite, when both immersion and emersion can be observed—or by any other eclipse; by moon culminating stars; by occultations of fixed stars by the moon; by lunar distances from the sun, or a planet, or a star, always East and West when possible; by an altitude of the moon in the prime vertical; or by chronometers: state always by which method obtained, and what reliance may be placed on it.
5. Observations on the variation of the compass, and dip of the needle, are very important.

### *Instruments.*

A repeating circle, or sextant of five inch radius ; a pocket sextant, an artificial horizon ; Kater's compass ; two mountain barometers, (Newman's make) ; and two thermometers, with a good pocket chronometer ; are sufficient for all common purposes.

### *Meteorology.*

1. Keep an exact register of the barometer and thermometer.
2. What are the prevalent winds ? What the periodical ?
3. What the average fall of rain ?
4. What the amount of evaporation, &c.?

### *Natural History.*

1. Note the geographical distribution of man, animals, birds, fishes, insects, plants, &c.
2. Obtain information on all branches of Natural History, bearing in mind, that the useful and practical is of more importance than the merely curious.

For detailed instructions, under each head, recourse should be had to the respective sources.

### *Ethnography.*

1. Obtain vocabularies of the native language—phrases rather than single words. Keep to a fixed standard of orthography in writing them down : the sounds of the vowels in *father*—*there*—*ravine*—*mole*—*lunar*, are recommended as the most simple, and as being both English and European.
2. Note the habits, manners, customs, and amusements of the natives.
3. What notion have they of a Supreme Being ? what of a future life ? what, if any, their religious ceremonies ?
4. What their treatment of the aged, of the sick, and of children ?
5. What seems to be the form of government ? Is division of property recognized ? Do they buy and sell land ?
6. Do they trade or barter with each other, or with strangers ?
7. Note the number of natives seen from day to day, distinguishing the sex, and children.
8. Are there many lunatics or idiots ?

9. What the usual form of feature? the shape of the skull? hair? color? stature? bodily constitution?
10. Is plurality of wives common? are women without husbands frequent?
11. Have they any marriage ceremonies? how do they treat their wives?
12. Do they give proof of capacity for civilization?
13. May the natives be trusted as guides—as messengers—or to procure food?
14. What presents please them best?
15. What words or signs do they use when hostile? or when friendly?
16. What are their dwellings? what their chief articles of food?
17. What their disposition—savage or gentle? rash, hasty, or inoffensive? Are they disposed to receive instruction?
18. Are any cases of cannibalism reported? (N. B. to investigate strictly under what circumstances they occurred.)
19. Are the people said to be increasing or decreasing?
20. Does slavery exist? What is the condition of a slave?
21. What are their diseases? What their medical treatment?
22. Can the traveller point out the most probable mode of civilizing and benefitting the natives?
23. What traditions are current respecting the origin, of the people?
24. Collect all information that can throw light on the migration of nations.

N. B. The greatest forbearance and discretion are strongly recommended in all intercourse with the natives — never to allow an imaginary insult to provoke retaliation which may lead to bloodshed. It must be borne in mind that their's is the right of soil — we are the aggressors.

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*Anniversary Meeting. May 3d, 1838.*

Rear Admiral Sir Charles Malcolm, President, in the chair.

The Meeting proceeded to elect Major Felix, Vice President, in the room of Mr. Wathen, who has left for the Cape; and the following Gentlemen, members of the Managing Committee, for the ensuing year.

*Resident* :—Major N. Campbell; Captain J. H. Wilson; W. C. Bruce, Esq.; Captain J. Bonamy; James Bird, Esq.; A. B. Orlebar, Esq.; Captain J. Holland; Captain R. Shortrede; C. MacLeod, Esq.; Dr. R. Brown; Dr. J. Burnes.

*Non-Resident.*—Colonel H. Pottinger; Colonel C. Ovens; Captain A. Burnes; Lieutenant E. B. Del Hoste; J. Howison, Esq.; J. Erskine, Esq.; Captain Melville; Captain E. W. Hart.

# CORRESPONDENCE.

*Read a letter from the Secretary of the Royal Geographical Society of London :—*

“ 1st December, 1837.

“ Sir,—I have the honor to acknowledge the receipt, this day, of your letter of the 1st August, in reply to my two letters of the 28th July and 30th December 1836, as also the ‘ Proceedings of the Bombay Geographical Society’ for July 1836 and January 1837. The Report of the Anniversary Meeting of May 4th 1837, a copy of the Rules and Regulations of the Society, and an official report on the Indus by Lieutenants Carless and Wood, I. N.—all which have been presented to this Society in the name of the Geographical Society of Bombay; and in expressing to you the thanks of the Geographical Society of London for these valuable communications, I am desirous to offer our sincere congratulations on your having come to the determination to stand alone, and on having already given such good proof of your ability to do so; and we fully agree with the opinion expressed by the Governor in Council, that, ‘an infinitely stronger stimulus to exertion is thereby applied to members of the Society in India, than if their memoirs, &c. were only to be published in Europe.’ Your proceedings already show the wisdom of the advice, and it will be the more evident as your publications become more widely circulated; and, so far from the change affecting any previously existing relations between the Societies, (except in the name, it does but strengthen the great bond which should unite us all, viz. the determination to diffuse all the information we are able, and to labor for the advancement of geographical science and discovery.

“ The memoir on the ‘bore,’ as it occurs in the Gulf of Cambay, by Lieutenant Ethersey, I. N. has also reached in safety, and will most probably be published in our next volume; I beg you to express to the Geographical Society of Bombay, our thanks for this communication, and for the promise of other communications hereafter, especially the Report of Lieutenant Carless, I. N. on the Indus.

“ Your contributors in the Indian Navy, are a credit and an honor to the service to which they belong.

“ I have now the pleasure to forward six copies of the last published volume of our Journal. — 1 Copy for the Geographical Society of



Bombay, the other 5 for members who subscribe for it. I also send according to your desire, 5 copies of vol. 114 now reprinted; a copy of Graah's voyage to Greenland, published by this Society; with two small pamphlets which I must request you to present to the Society in my name.

"The recently published volume of our Journal, containing all the latest intelligence received by us, up to the date of its publication; since that period, we, and probably you also, have heard of Captain Alexander's return to Cape Town, having reached Walviesh Bay on the West Coast of Africa, thence penetrated 300 miles to the east-ward and so worked his way back to the Colony: he and his party had suffered dreadfully from both hunger and thirst.

"To the North, the Russians have just returned from an expedition to explore Nova Zembla, the result of their examination being, (to judge only from a short letter, from St. Petersburg) to cut the islands in half longitudinally, as they exist on all our maps, and to strike out the eastern portion. At this moment I do not remember any other news.

"Believe me, very faithfully your's,  
(Signed.) "JOHN WASHINGTON."

"P. S. I omitted to mention the establishment of a Geographical Society at Frankfort, on the Mayne, which you will be glad to hear; if not already known. As also the expedition to the N. W. Coast of Australia which we hear of, as having arrived safely at the Cape on October, 1st, this you probably also know."

The publications accompanying this letter were laid on the table.

*A letter from Captain Burnes addressed to the President.*

"Cabool, 14th February, 1838.

"SIR,—I have the pleasure to transmit, for the purpose of being laid before the Geographical Society, a valuable native work on Geography, the 'Masalik wo Moomalik,' with twenty-one maps which I procured in this city.

"Should the work, in the opinion of the Society deserve translation, it might be prepared in Bombay, or by transmitting it, through the Society in London, to the Oriental Translation Fund, which received from me with great satisfaction a similar work regarding Balkh and Bokhara: but of this the Society will be the best judge.

"The department of Oriental Geography seems to be peculiarly within the province of our Society. We are indebted to Arabic works for much of our chemical knowledge, and though in a progressive

science like geography, our researches into the literature of that people may not prove equally profitable, it can never be devoid of interest to know the opinions of a race whose emulation diffused the taste and the rewards of science, from Samarkand and Bokhara to Fez and Cordova.

"I remain Sir, your most faithful servant,  
(Signed.) "ALEXANDER BURNES."

The manuscript presented by Captain Burnes, having been previously submitted to the Committee, Dr. Bird forwarded the following minute on the work, which was read.

"There are several general geographical works and itineraries, known by the name of *Masalik wo Moomalik*, but the one now sent me, is, I find, the same which has been already translated by Sir William Ouseley, and published under the name of the 'Oriental Geography of Ebn Haukal.' I have compared the present work with Sir William's translation, and have ascertained them to be precisely the same, though in the present work, which was translated from the Arabic, by Aboo Mahosan Mahomed Saad, I do not find the name of Ebn Haukal once mentioned. The maps and routes from different points, would, if published at the lithographic press and illustrated, as the geography of the middle ages, be a very curious and useful work, to indicate the changes which have taken place from the middle of the tenth century to the present day, among the tribes of Persia, Tartary, and the north of Europe. If the Society be willing to publish a small tract of this kind, I would gladly lend my assistance in superintending the lithography of the maps, and writing out the illustrations of the several parts."

"23rd April, 1838.

(Signed.) "J. BIRD."

The meeting resolved, that Dr. Bird's offer be most thankfully accepted, and that, in conveying the best thanks of the Society to Captain Burnes for his curious and valuable donation, this resolution be at the same time communicated to him.

A letter from James Erskine, Esq. Kattywar, to the Secretary, promising to communicate to the Society an account of the Katties, drawn up from information derived from native sources.

A letter from Lieutenant Postans, communicating his intention to visit Girnar in Kattywar, for the purpose of copying the inscriptions there for transmission to Calcutta; and also presenting to the Society a census of the population of Bhooj, taken by order of His Highness the Rao, in February last.

*A letter from Major Mackintosh to the President, dated Malta 12th March last, forwarding, for presentation to the Society, "A short account of the Kattouries or Kattkuriet residing in the Konkan and Attaveessy." Regarding this communication Major M. writes in the following terms. "I am quite ashamed of myself for not having prepared the accompanying paper long since. I hope it may reach you, although it must be admitted by any person who may take the trouble to read it, that it is not worthy of being transported for so many hundred miles."*

*A letter from Lieutenant Nash, Engineers, giving an interesting description of the remains of Aurungzebe's standing-camp. The remains are situated at a place called Brimeshwur or Brimapoor, (in the Deccan) distant 20 miles from Mohol, on the Sattara side of the Bheema.*

#### LIBRARY DONATIONS.

1. Map of the western part of the continent of India showing the Territories of the Bombay Presidency. *Presented by Government through Major N. Campbell, Qr. Mr. Genl.*

2. Map of the Post Office stations and Post and Bangy routes throughout British India. Constructed by J. B. Tassin, &c. from materials collected and arranged by Captain T. J. Taylor; *by Captain Taylor.*

3. Reports of a Committee for investigating the coal and mineral sources of India, (two copies;) *by James Prinsep, Esq. and Dr. J. McClelland.*

4. Printed Letter addressed to the Right Hon'ble Sir. R. W. Horton, &c. &c. on the project of opening a direct passage for shipping from the Gulf of Manar to the Bay of Bengal. *Presented by Captain Quin, R. N.*

5. Journal of the Royal Geographical Society of London. Vol. VII. Parts 1st and 2nd; *by the Society.*

6. A sketch of the Progress of Geography; and of the labors of the Royal Geographical Society during the year 1836-37, by the Secretary; *by the author.*

7. A letter to the President and Council of the Royal Geographical Society, on antarctic discovery; *by the author.*

*Geological works, presented by a friend to Science.*

8. Transactions of the Geological Society of Cornwall, 4 vols.

9. Lyell's Principles of Geology, 3 vols.
10. Ure's New System of Geology, 1 vol.
11. Macculloch's System of Geology, 2 vols.
12. Conybeare's and Phillips's Outlines of the Geology of England and Wales, 1 vol.
13. Cuvier's Theory of the Earth.
14. De la Beche's Sections and views illustrative of Geological Phenomena, 1 vol.
15. Geological Map of England and Wales.

#### PAPERS PRESENTED.

1st. *Report on the Iron of Kattywar, its comparative value with British metal, the mines and mode of smelting the ore.* By Captain G. L. Jacob, 2nd Regt. N. I. Communicated by Government.

On the proposal of Dr. Bird, it was resolved, that this valuable Report be forwarded, in the name of the author, to the Agricultural Committee of the Royal Asiatic Society, as that body has been recently directing attention to the subject of Indian iron. (Specimens of the iron and ore, presented to the Society on a former occasion by Captain Jacob, from Kattywar, will likewise be forwarded.)

2nd. *Journal of a voyage along the East Coast of China to Corea and Loochoo.* By Lieutenant Stephens, I. N. Communicated by Sir Charles Malcolm.

Resolved that the thanks of the Society be conveyed to the authors of the above valuable communications.

The Secretary then read the,

#### REPORT OF THE BOMBAY GEOGRAPHICAL SOCIETY,

*For 1837—38.*

Twelve new members have been added to our list since the date of the Annual Report for last year. The contributions which have been received during the same period amount to nineteen, including those which have been presented at this meeting, and are now on the table.

Of these papers a list is here submitted, which will bring into one view the subject of each communication, the author to whom the Society is indebted for the information, and the manner in which the papers have been disposed of.

## PAPERS, &amp;c.

No.	Titles.	By whom communicated.	Remarks.
1.	Account of the present state of the trade between the Port of Mandavia in Cutch and the Eastern Coast of Africa. By Lieutenant T. Postans.	The Author.	Printed in Quarterly Report of the Proceedings for August 3rd, 1837.
2.	Notice on the Sulphur Mines of Cummeer in the Persian Gulf. By Lieutenant G. Jenkins, I. N.	The President.	Ditto. Ditto. Ditto.
3.	Information on the Town of Burburra, situated on the East Coast of Africa. By Lieutenant R. Ethersey, I. N.	The Secretary.	Ditto. Ditto. Ditto.
4.	Report of the Strata passed through in the Bore at Gogo and close to the Bunder. By Lieutenant G. Fulljames.	Government.	Noticed in Quarterly Report of Proceedings for November 2nd, 1837.
5.	Report on the state of the Kedwaree mouth and River. By Lieutenant T. G. Carless, I. N.	Ditto. . . .	Transmitted to the Royal Geographical Society of London.
6.	Medical Memoir on the Plain of the Indus. By Dr. P. B. Lord.	Ditto. . . .	Noticed in the Quarterly Report of Proceedings for November 2nd, 1837.
7.	Commercial information regarding Bhawal Khan's Country. By Lieutenant R. Leech, Bombay Engineers.	Ditto. . . .	Ditto. Ditto. Ditto.
8.	Journal of an excursion to Sanaa the Capital of Arabia Felix, in 1836 By Mr. C. J. Crutten- den, I. N.	Ditto. . . .	Extract printed, do.
9.	Statistical account of the town of Anjar, in the Province of Cutch. By Lieutenant T. Postans, 15th Regiment, N. I.	The Author. .	Ditto. Ditto. Ditto.
10.	Notes taken during a journey in Oman, and along the East Coast of Arabia. By Lieutenant F. Whitelock.	The Author. .	Ditto. Ditto. Ditto.
11.	Memoir on Tahrie on the Persian Coast. By Lieutenant G. Kempthorne.	The Author. .	Ditto. Ditto. Ditto.
12.	Statistical account of the town of Bhooj, with a sketch of the inland trade of the Province of Cutch. By Lieutenant T. Postans, 15th Regiment, N. I.	The Author. .	Ditto. Ditto. for Feb. 23rd 1838.

No.	Titles.	By whom communicated.	Remarks.
13.	Reports on the trade of the countries bordering on the Indus; containing, 1st. On the commerce, of Shikarpoor and Upper Scinde. By Captain A. Burnes. 2nd. Report of a visit to the three cloth manufacturing towns of Ranipoor, Gambat and Kooda. By Lieutenant R. Leech, Engineers. 3rd. On the trade of Khairpoor in Scinde. By Moonshee Mohun Lal.	Government.	Printed in Do. Do. Noticed in Do. Do. Ditto. Ditto. Ditto.
14.	Notes on Customs prevailing among the Maldivians, &c. By Mr. W. Christopher, Midshipman, I. N.	Government.	Extract printed in Do. Do.
15.	Report on the Iron of Kattywar, its comparative value with British metal; the mines, and mode of smelting the ore. By Captain G. L. Jacob, 2nd, Regiment N. I.	Government.	Forwarded to the Agricultural Committee of the Royal Asiatic Society of Great Britain.
16.	Note on the Geology of Balmeer. By Assistant Surgeon Forbes.	The Author.	
17.	A Short account of the Kattouries or Kattkuries residing in the Konkan and Attaveassy. By Major A. Mackintosh.	The President.	Printed in this number.
18.	Report on the Inundation that occurred at Surat on the 28th, of August 1837. By Lieutenant G. Fulljames.	Government.	Ditto. Ditto.
19.	Journal kept during a trip to Shewan and Lake Munchur, in the month of August 1837. By Mr. A. W. Whiteburn, Midshipman, I. N.	Government.	Preparing for the Press.

In following up the plan adopted in our last Annual Report, we have endeavoured to collect information, from sources that will be mentioned, which enables us to place before the Society a short notice of the surveys, maritime and land, and of the missions (those undertaken solely or partly with a view of exploring the countries in our

vicinity), which are either now in progress or have been accomplished during the year, by individuals attached to this Presidency.

**MARITIME SURVEYS.** In continuation of the notice which we printed in our Annual Report for May 1837, giving an account of the progress of the surveys in this department for that year, we have now to report, that the surveys of the Chagos Archipelago and Saya de Malha bank, which were then in operation, have since terminated, Captain Moresby having returned to Bombay in the Benares in September last.

Of the Chagos, *Owen's Bank* still remains to be examined, to complete the survey. Captain Moresby observes with reference to this bank (Owen's,) that "as fixed by Mr. Horsburgh, it is placed in the charts in longitude  $70^{\circ} 12'$  E. deduced from Diego Garcia but as I place Diego Garcia eight miles to the east, Owen's bank will be in latitude  $6^{\circ} 46\frac{1}{2}'$  south, and longitude  $70^{\circ} 20'$  east." Of the unexplored portion of the Saya de Malha, it is stated that the southern half of this bank has been well sounded, and the survey completed as far as latitude  $9^{\circ} 37'$  south. From this point to its northern extremity, in latitude  $8^{\circ} 40'$  a space of about 90 miles, extending north northwest, remains unsurveyed, which would take a vessel one month to complete.

Captain Moresby does not consider that the longitude of Saya de Malha has been well fixed. He recommends chronometric measurements to be taken from Diamond Island, Peros Banhos, which is situated (the establishment there) in latitude  $5^{\circ} 15'$  south, and longitude  $71^{\circ} 48'$  east: thence he would proceed to *Owen's Bank*; then to the Saya de Malha, and, commencing in latitude  $10^{\circ}$  south, longitude  $62^{\circ} 10'$  to  $62^{\circ} 20'$  east, he would run along the east edge of the bank in ten or 15 fathoms, as far south as  $10^{\circ} 50'$ , by which the longitude of the east side of the bank would be determined. He then recommends proceeding to the north end of the bank to fix that extremity, and afterwards to run to the Seychelles, and, after determining the geographical site of the landing place at Mahé, to return to Peros Banhos, to verify these measurements. This operation would take four or five months to execute correctly; and Captain Moresby adds, that there still remains a large extent of unexplored space among the Seychelles Islands, which requires to be surveyed.

The execution of the charts of this survey has called forth the admiration of members of this Society, before whom they have been exhibited by the President, Sir Charles Malcolm; and it is confidently anticipated, that in this respect, as well in the accuracy of the

data from which they are constructed, the charts of the Maldives and Chagos Archipelago will be found equal to those of the Red Sea, which have been so highly approved of by accomplished Hydrographers in England. In concluding this notice we cannot omit to state, that those interested in the advancement of Geography in this part of the world, are much indebted to this Officer for his labors towards that object. In the year 1828, Commander Moresby was engaged in surveying the Laccadives; in February 1829, he proceeded under the orders of the present Superintendent of the Red Sea, to report on the ports of that sea in reference to their capabilities for forming coal depots, and on the practicability of navigating by steam between Bombay and Suez. He afterwards received command of the *Palinurus*, one of the vessels destined for the survey of the Red Sea. This important survey was commenced in September 1829. The coast between Suez and Jeddah was allotted to him, whilst the late Captain Elwon undertook the examination of the coast, islands, &c. between Jeddah and the straits of Bab-el-Mandeb. This survey was not finished until May 1834. and, besides executing the portion which was originally assigned to him, he had to complete the southern half, in consequence of Captain Elwon being called away to take up his situation as Commodore in the Persian Gulf. His survey of the Maldives, which has been already noticed, commenced in September 1834.

**SURVEY OF THE GULF OF MANAAR.** Lieutenants Powell and Ethersey, are now carrying on this survey, which has been undertaken preparatory to executing the project of establishing a navigable channel between the Gulf of Manaar and the Bay of Bengal, by the Paumben passage. The survey on the south side of *Adam's Bridge*, has been much interrupted owing to the heavy surf which was experienced at this part. In January last Lieutenant Powell, in surveying from the south side of the island of Ramiseram, towards Adam's Bridge, found the surf so high in the vicinity of the latter, that his boats were prevented from landing, or even approaching within a considerable distance of it; and he was under the necessity of quitting this part on the 15th January. He proceeded to the westward of the Paumben passage, where he continued to survey along the coast of Madura to the village of Mootta Petta.

On the 8th of the following month (February) he still found the *Bridge* unapproachable; the surf kept up by a long swell, which rolls up the Gulf of Manaar, at this season, being then as high as



when he left in January. The Manaar channe, however has been surveyed, and it is expected that before the setting in of the south-west monsoon, the whole of the soundings on the south side of Adam's Bridge will be completed by Lieutenant Ethersey, who will then pass through the Laumben channel into Palks bay, and continue the survey on the north side, where no interruption is anticipated during that season, as is the case on the south side.

**SOUTH COAST OF ARABIA.** Commander Haines was first despatched on this survey in October 1833, and discontinued operations in May 1837. But only thirty-one months of this period were employed in surveying, for during thirteen months he was engaged on duties quite unconnected with the survey.

He has however, completed the examination of the coast from the straits of Bab-el-Mandeb, in long.  $43^{\circ} 31'$  E. lat.  $12^{\circ} 39'$  to long.  $50^{\circ} 50'$  E. lat.  $51^{\circ} 4'$  north, and from Cape Isolette or Ras Gugorah in lat.  $18^{\circ} 58' 28''$  long.  $57^{\circ} 51' 7''$  E. to Rasnoos in lat.  $17^{\circ} 12' 20''$  long.  $55^{\circ} 21'$  E. the coast from Bunder Ghingheree to about 9 miles to the westward of Morebat, has also been examined.

There remain of this survey as originally planned, the following portions of the coast still to examine : viz. that between Cape Isolette and Ras el Had, and from longitude  $50^{\circ} 50'$  E. latitude  $15^{\circ} 4'$  N. to within 9 miles of Morebat, on the Arabian side ; and on the African coast, from Guardafui to within a few miles of Ras-el Bir.

To complete this, and to survey Kurachee and the principal port of Mekran, Lieutenant Carless left Bombay in the *Palinurus* in October 1837. Information received from him has been printed in our last quarterly Report, as will be seen by reference to the extracts from his letters, addressed to our President, from Kurachee bay and Sonmeanee. He left the former place on the 7th of February, and, after a passage of sixteen days, the *Palinurus* anchored in the large bay on the south side of Ras Hafoon (Cape Orfui.)

"From this place" Lieutenant Carless reports, "the survey of the eastern coast of Africa has been completed up to Ras Jerdaffoon (Cape Guardafui) and from thence to the westward as far as Ras Gulwanee, a low point about 30 miles east of Burnt Island. The distance between Ras Hafoon and Ras Gulwanee is 340 miles.

"The country near the sea has also been minutely examined, and I think the information that has been obtained will prove in a geographical point of view, extremely interesting.

"We found 14 bunders or towns, each defended by two or three

forts, between Ras Jerdaffoon and Ras Gulwainee, besides many villages, and streams of water innumerable, either flowing from springs amongst the mountains, or filled by the rains. The part of the coast that has been examined is inhabited by two Somauli tribes, the Mijjerthaynes and Singallees. Wherever we have fallen in with them, they have invariably behaved towards us in the most friendly manner; so much so, that the officers of the vessel have been enabled to examine the country near the coast, frequently alone and unarmed, in perfect security. On every occasion they expressed the greatest satisfaction at our having visited their towns, and said they regretted their coast was not frequented by our vessels, for they looked on us as friends." The above communication is dated Ras Gulwainee 28th April, when Lieutenant Carless had been obliged to suspend operations in consequence of the prevalence of scurvy among this crew.

In a communication of a later date written after the *Palinurus* had reached Mocha from the Coast, Lieut. Carless observes that, 'The Survey of the African coast has been extremely interesting and very pleasant, much more so than I anticipated. On reaching Hafoon, my first care was to fix the longitude, which by our observations differs 10 miles from Captain Owen's. It was however, satisfactory to find, that the distance between Bombay and the Cape only differed two miles from his, he having made Bombay 8 miles more to the westward by his measurement across. Throughout the whole distance that has been surveyed we have found excellent anchorage; there is a bank of soundings extending every where from the shore, and numerous bays which are sheltered from the strong easterly winds that blow during the N. E. monsoon. As yet we have met with no place that would serve as a coal depot, but if any of the Steamers beat down or fall short of fuel when near the coast in the N. E. monsoon, she might run in and anchor in safety, and procure at some parts a supply of firewood. The whole coast from Ras Hafoon to Ras Gulwainee where we left off, is very mountainous. All the hills are of limestone formation, and are covered with the trees from which frankincense and myrrh are obtained. Many of the ranges are 6,500 feet high, run 120 and 150 miles in a straight line and are flat along the summit, descending at the extremities in precipices which at a distance have the appearance of steps. In such a mountainous country, rain must of course fall in large quantities, and we found the low land accordingly, scored with the beds of rivers, and abundantly supplied with excellent water. Several of those beds are 300 and 400 yards broad, and are cut through the limestone rock to

a depth of 250 feet. On one occasion we had rainy weather for two or three days, and for some days after these were, broad streams of water flowing to the sea at every two or three miles in the vicinity of the coast. The country near the sea is inhabited by Somauli tribes; of which we have as yet seen only the Mijjerthayne and Singallis; they are rather a fine race and have always behaved to us with the greatest civility and friendship. At Bunder Ghasim, where the principal chief resides, peace was proclaimed with all formality between the English and the Mijjerthaynes, and I was requested to tell our sovereign of the fact. On the coast there are numerous bunders or scaports, and the inhabitants from their intercourse with Bombay and the Arabian coast, are comparatively speaking civilized; but inland, the country, is inhabited by Bedouins as they are termed, who are said to wander about with their flocks and herds and live almost in a state of nature. The country within two days' journey from the sea abounds with elephants, lions, panthers, leopards, ostriches, &c. and is overrun with trees and bushes, most of which yield gums. As we were perfectly unacquainted with the character of the people who we were led to believe were cruel and treacherous, I did not deem myself authorized to send any of the officers inland, but it will be easy to make such arrangements next season, as will enable me to allow any one who may wish it to take a trip to the interior. The trade of the African coast is in the hands of the Arabs, who bring rice, jowaree, dates, coarse cloth, and iron, for which they receive in exchange, frankincense, myrrh, and sheep. The value of the trade cannot be very great, but it must be extremely lucrative to the Arabs."

**SURVEY OF THE INDUS; AND MISSION TO CABOOL.** Lieutenant Carless has this year again visited the mouths of the Indus in his passage from Bombay to Kurachee, for the purpose of laying down buoys and erecting beacons, to facilitate the navigation of the Hujamree and Kedywaree mouths. He has likewise examined the extreme western, or Phittee, mouth of the Indus.

Mr. Whiteburn, one of the officers who were left last monsoon on the Indus to observe the river during the swell, has since our last report, proceeded up as far as Shewun, and has visited the Muncher Lake. The report of his observations on this expedition, has very recently been received by the Society.

In our last report we were unable to furnish any information relative to the Mission to Cabool, which, under Captain Burnes left Bombay in October or November 1836. On the present occasion we have

it in our power, through the kindness of Sir Charles Malcolm, to lay before the Society some very valuable and interesting information respecting the Upper Indus, and the progress of the Mission from Shikarpoor to Cabool. This information is contained in extracts of letters, received by the President from Lieutenant John Wood, Indian Navy, a member of that Mission, which follow :

*" On the Indus, July 4th, 1837."*

" As we are approaching the frontier of a very unsettled country, I have this day sent off for Bombay the latitudes and longitudes of all the principal places between the Sea and the town of Dera-Ismael Khan. The country alluded to, is that of a powerful Afghan tribe, called Esau-Khail, or Khyle,\* as it is sometimes pronounced. If you have Mr. Elphinstone's map of Cabool by you, you will see that this tribe, of which I speak, occupies the west bank of the Indus, from about the salt range to latitude  $32^{\circ} 20' N$ . But I must retrace my steps and briefly sketch our proceedings, since my letter to you from Shikarpoor. From that celebrated commercial mart to the country of the Daud Pootras, the only incident which occurs in my journal worthy of notice is a robbery and murder. This is deserving of attention from its tending to bring us better acquainted with the true state of the country where it occurred. I give the remarks verbatim from that day's journal. Wednesday 19th April. Passed a village, which three days ago was attacked by a party of marauders, who had crossed the river on inflated skins from the western bank. They were six in number, and belonged to the Mozarie tribe. The village is the property of a servant of one of the Khyrpocr Ameers. One of the villagers was killed, and two were wounded.

" On enquiry I find such visits are not unfrequent, and that on an average they are repeated at intervals of eight and ten days.

" The western bank of the river has here but few villages, from the same cause, and the laborer who spends the day in the fields on this bank, crosses to the opposite at nightfall, for security.

" The tribes that commit these outrages are the Boordce and the Mozarie. The principal town of the first is Meerpoor, and the name of its chief Sheik Mahomed.

The principal towns of the mozarie are Boodanee and Rosan.

*" Ahmedpoor, Thursday, May 2nd."*

" Yesterday Bhawul Khan came in person to see Captain Burnes, and this morning the latter returned his visit. We rode from the house

\* A tribe, *خا*

of Lieutenant Mackeson, where we were residing, to the Khan's bungalow in carts, drawn by mules, a conveyance of which I cannot speak in terms of commendation. Before entering (the house) we passed down an open column of thirteen hundred men, two deep and tolerably equipped. The upper story of the house was occupied by the chief and the elite of his suite, while the lower flat contained a well dressed orderly assemblage. Passing through the latter we ascended a narrow carpeted staircase, and, on gaining the top were received by Bhawul Khan. He is a man of forty, of a large bony frame though somewhat tending to corpulency. He was dressed plainly, but his handsome figure and manly look are improved rather than impaired by the simplicity of his attire.

"From Ahmedpoor, where we met Bhawul Khan, we proceeded on to his capital, Bhawalpoor. At the former place, 18 miles from the Indus, is the residence of the British Agent for the navigation of the river. He was then absent, settling some boundary disputes on the Sutledge, but has since joined our party, and goes on with us as far as Attock, thence to Cashmere, in company with a medical officer from Calcutta. &c. &c.

*"Futty Jungh, 31st July, 1837."*

"A cold leaves this tomorrow, and I do not expect to have another opportunity of writing till our arrival at Peshawar or Cabool. My object is to give a precis of our movements up to this date. I left off at Mittun Kote, and shall now resume the thread of my tale. At this place we entered the territories of the Lahore Maharaj. We encamped near the river, and visited the town but once. On entering we were saluted by the Sikh force with three guns. Mittun stands about two miles from the river. There is such a similarity in the towns on the banks of this river, that a picture of one will answer for all. They are generally elevated. The mound on which they stand is artificial and is always under fifty feet high; it is composed of broken pottery, pieces of burned and sun-dried bricks, and the debris produced by their decay. Rain conglomerates the mass and renders the ascent gradual on all sides. On the top of this are piled a collection of mud hovels, from amongst which rises a red-colored mosque in ruins, overlooking which are a few old but healthy evergreen trees. This is one of the lower description of villages. If the town is of any commercial importance, in place of the mud hovels, substitute sun dried brick ones. The place has two streets which cross each other at right angles, and many substantial dwelling houses, two and three

stories high. The streets form the bazar ; the large tenements are the property of Hindus . . .

"I was anxious to get a series of lunar observations at Mittun, but just as we had arranged to remain for this purpose for a few days, news reached which obliged us to resume the voyage. Between Mittun and Dera Ghazee Khan, I saw nothing of the country, and we voyaged so rapidly that none of the party saw more. At Dera Ghazee we rode once to the town, and were invited to inspect the fort. We got the length of the door, and though conducted by one of Runjeet's Sirdars, the sentinel on guard refused admittance alleging there was no order from the Maharajah. This was afterwards reported, and when we had got 120 miles north of Dera Ghazee, a purwana arrived ordering all concerned in this affair to be turned out of the service, sent to beg Captain Burnes' pardon, and to be punished as he directed. Captain Burnes made them a present of a turban each, and sent them back as having done the duty of good soldiers. On quitting Dera Ghazee Khan, Mr. Lecch and Dr. Lord went over to Mooltan, Captain Burnes made the best of his way to Dera Ismael Khan, and I continued the examination of the river. The river had now risen so much that I could do very little. When the Mooltan party arrived, we started immediately for Kala Baugh. The old town of Dera Ismael Khan has been washed into the river. The new town is quite a skeleton, but is well laid out, and if the plan laid down for the embryo streets be ever completed, the new Dera Ismael Khan will rival any town on the banks of the river. On account of the difficulty of tracking on the west bank of the Indus, between Dera Ismael and Kala Baugh, Captain Burnes and the rest of the party went over to the east, and I was directed to follow up the west bank, not only to be able to report upon the navigation, but to have an opportunity of meeting with Ahmed Khan, chief of the clan Essau Khail, who had repeatedly written to Captain Burnes, and was now prepared to pay him all the attention in his power. Ahmed Khan visited me in my boat, sent his vizier to accompany me to Kala Baugh, gave me extra trackers, fed my people and expressed himself sorry that he could do nothing more to show his respect for the English. I was very much struck with this chieftain. Every man speaks well of him ; even his mortal enemies, the Sikhs, never mention his name but in terms of commendation. The banks of the river are here *six* and *seven* miles apart. I succeeded in getting up the west bank the whole way save about three koss. At a place called Kaffer Kote, the mountains

come in upon the river, I injured both my feet and am now lame, but not laid up. At Kala Baugh our position was rather singular. We were within the beat of the drums of the hostile forces. The Sikhs occupied the east bank of the Indus. The Afghans were assembling to oppose their landing on the west. A detachment of the Afghans rode up one evening to our camp, and told us that our tents were pitched on the spot where they intended to contest the passage of the river. While we were there, the Sikh force crossed, and took up a position about 200 yards in rear of our's. To avoid a random shot, we struck our tents and went over to the east bank.

"The accounts of the difficulties to be overcome in navigating the river above Kala Baugh, at once induced Captain Burnes to take to the land route; but I was ordered to ascend as high as possible. The distance is 70 miles. In the latter end of April the Sikhs, to bridge the river at Attock, had to get boats from Kala Baugh. In that month five boats were twenty-two days in making the passage, each had a crew of 62 men, 12 men to keep the boat clear of the rocks, and fifty to track; they went together so that each could aid the other. I got up 28 miles (in the latter end of July) when the crew refused to proceed further. They were men of the country, and lived at Muckud, a place 12 miles north of Kala Baugh. Deserted by the men 43 in number, I was obliged to abandon the attempt. Here both banks are inhabited by lawless plundering hordes of Patans, who own no rule. The Sikhs possess Muckud, but they have no authority without the fort; so little have they that Captain Burnes wishing to send me the means of joining him from the latter place (viz. Muckud) could not procure a guard. They said they would go, but that it was certain death. With only one servant and without arms, I rode through the country unmolested, and joined Captain Burnes yesterday, at a place called Pinde Mulik, which you will see on the map.\* We are on route to Attock, but instead of going the direct route of 28 koss, to avoid the marauding tribes I mentioned, the Sikhs are taking us a round-about of some 48 koss. Again one of the principal Sirdars who is marching to Kala Baugh from Attock to augment the Sikh force at the former place, with 1,000 men, and three or four guns, has made the same detour for a similar reason. My present plans are to descend the river from Attock, risk one chronometer in the boat, and again rejoin Captain Burnes by a land route, as quickly as possible. Two of the five boats that went to Attock were lost; one a little below

\* In the map this place is written *Pindee Mulik Oulea*.

Attock ferry, another on a rock, in the middle of the river, 18 koss below Attock. The river is there hemmed in to about 100 yards, or, as Mr. Elphinstone says, is a stone's throw across. The whirlpool drew the boat into its vortex in spite of the exertions of the crew.

“ *Dukka, on the Cabool River, 5th September, 1837.*”

“ My last was from Hassim Abdool; from that place I made a forced march to Attock. At Attock I hired a *duggah* ( the name of the boats used on this part of the Indus ) and dropped down to Kala Baugh. The distance is 108 miles, and we were 12½ hours in going. It was fearful in some places. For 18 koss the mountains rise in precipices from 300 to 400 feet high, and from the *duggah* I could throw a stone on either bank, that is, on the sides of the hills that overtower the stream. The channel is very rocky; ledges and bowlders lying in the very centre of the stream. The windings succeed each other so rapidly, that the dangers are no sooner sighted, than you are up with them. Before entering the difficult part the boatmen said their prayers, and repeated them on approaching every spot which they knew to be dangerous. When the last portion of the 18 koss had been passed, there was a general thanksgiving; the deepest water was *thirty-one* fathoms.

“ From Kala Baugh, I went up the Shukkur-Durrah Pass, through the Kuttock and Bungush country to Kohat, and thence to Peshawer, where I rejoined Captain Burnes.

“ The country of the Bungush has not been overpraised by Mr. Elphinstone. I have seldom seen prettier valleys and plains than those of the Shadu-Khail and Kohat. After coming through a stony pass, the verdure of the plains, the clearness of the streams, the fruit trees and cultivation delighted me. No where is more attention given to agriculture. It has more the appearance of garden work than field labor. Yet this delightful country is almost deserted, and the complaint in every mouth is of oppression and misrule on the part of these chiefs. Kohat, which in Mr. Elphinstone's time must have been a little paradise, is now a petty ruinous looking village; it might still be restored. The Sikhs overran the country two years back, and cut down its groves for firewood. In these countries I received every attention from the chiefs and their people. While at Kohat, Drs. Falconer and Lord came up from Peshawer to examine into the metallic treasures of the neighbourhood. This duty had been partly assigned to me, but as the subject was most important, and I had seen enough at Kohat to persuade me that its fertili-



ty in the useful metals had been exaggerated, I wrote to Captain Burnes my opinion, and my inability to make such observations. Both the medical men had previously contemplated a trip to the metallic veins of Kohat, but this rendered it imperative. Before their arrival I had determined the position of a sulphur mine, and naphtha springs 30' east of Kohat. The Doctors found no indications of gold, silver, copper, antimony, &c., said to exist, and were equally unsuccessful in their search for the coal deposit. The onus is therefore off me, should subsequent investigation confirm previous reports. Coal, however, is *known* to exist."

The latest intelligence of this mission, which has reached us, is dated February 18th. At that time Captain Burnes was in Cabool alone, all his companions having left long before for the purpose of exploring the countries of Upper Asia. Lieutenant Leech was at Candahar, Dr. Lord at Kondooz, and Lieutenant Wood had proceeded far into Budukhshan, "exploring that part of hidden Asia, which has not been trodden by a European since the time of Marco Polo!" Captain Burnes, whose words we quote, in a letter to Sir Charles Malcolm of the above date, states that, "the mode in which all this good fortune came about is simply this. The chief of Kondooz who was so inimical to poor Moorcroft, and frightened us, had a brother suffering under eye disease: he implored our assistance; Dr. Lord agreed to go, and I was not long in sending an *oriental* epistle to him. The opportunity was too good to be lost, so Lieutenant Wood accompanied, and, by a letter which I had from him last night, dated 22nd ultimo, he was at *Jerm* on the very frontier of Budukhshan northeast of Chetral, and not far from the mines of Lapislazuli, which he has visited, as well as the extreme source of the Budukshan river.

"As far as I am concerned, he has a *carte blanche*, and in reply he tells me, that he will go 'ahead!' If the winter prevents him getting to Pameer and the source of the Oxus, and the question of the navigable facilities of that river. \* \* \*

"I have got his field-books safely lodged by me, and as Dr. Lord who sent them to me says, they are of the highest interest. He has sent vocabularies of all the dialects put forth by M. Jacquet of Paris; which I got from the Punjaub, through the kindness of M. Court."

The Society is indebted to the President for having communicated the above information; and it is gratifying to know that a report has been received of Lieutenant Wood's success in accomplishing his proposed visit to the source of the Oxus. This river is stated to rise from a sheet of water, situated at the enormous elevation of 15,600 feet

above the level of the sea. Having returned safely to Kondooz from this interesting journey, he had again set out on a second expedition to examine the fords of the river within the territories of Moorad Beg.

It is added that Dr. Lord's influence at Kondooz has been of essential service to Lieutenant Wood in his present expedition.

#### SURVEYS CARRIED ON WITHIN THE TERRITORIES OF THIS PRESIDENCY.

It would require more space than we can bestow on one subject, were we to enter into any detail of the labors of the scientific officers, whose surveys are extending our knowledge of the geography and statistics of this Presidency. In Kattywar, Captain Boyd is conducting the survey, which was lately under the direction of Captain Benbow, who has gone to Europe sick.

Lieutenant Giberne is employed in the Mhye Caunta. The examination of the Ghats and line of country between Belgaum and Malwan, has been assigned to Lieutenant Hebbert of the Engineers. Lieutenant Stuart of the Engineers has been engaged this season in surveying the line between Bombay and Nagpoor, in the direction of the proposed grand road, which, it is supposed, will pass over the Malsege Ghat, and through Jalna.

Captain Forster and his establishment have been employed in surveying the roads, bunds, and tanks, and in other operations for the improvement of the country, throughout the Deccan and Concan; and Lieutenant Wingate with a body of officers, appointed lately to the revenue survey, is at work in the Poonah Collectorate.

The above contains all the information which we have to offer on the subject of the land surveys now in operation: nor can we conclude this report, without acknowledging, with much respect and gratitude, the marked liberality, with which every useful effort of the Society is supported and encouraged by the Government of this Presidency.

**LIBRARY FUND.** A separate voluntary subscription has been established for the purpose of enabling the Society to purchase books. The object of collecting a useful geographical library, indispensable to every institution of this kind, is especially so to ours, whose members are deprived of resources, which private persons in Europe, with very moderate means can easily command. This object, therefore, it is hoped will receive the support of every member of the Society, who is at all interested in its progress.

The sum already received on account of the Library, amounts to about 500 rupees. This amount it is now proposed to remit to

England, to be applied to the purchase of some standard works on geography.

*Bombay Geographical Society.*

August 13th 1888. At an Extraordinary Meeting held this day in the Society's room Town Hall.

Present, Colonel T. Dickinson, Vice President in the chair. Captain Daniel Ross; Colonel D. Barr; Captain R. Oliver, R. N.; Captain J. Bonamy; Dr. C. Morehead; R. L. Leckie, Esq.; Lieutenant J. G. Forbes; R. Smith, Esq.; A. B. Orlebar, Esq.; H. W. Morris, Esq.; C. McLeod, Esq.; Dr. J. Burnes; J. Bird, Esq.; Lieut. G. Fulljames; J. Sindry, Esq.; John Graham, Esq.; J. F. Heddle, Esq. and Dr. J. Glen.

Colonel T. Dickinson briefly stated the object of the Meeting, viz.; to take into consideration an address drawn up by Dr. Bird, which he proposed to present to Rear-Admiral Sir Charles Malcolm, in the name of this Society, on the occasion of his resigning the office of President. Dr Bird then read the address as follows:—

To Rear Admiral Sir CHARLES MALCOLM,

Late President of the Geographical Society, Bombay.

SIR,

Having received intimation of your intended departure for England, and consequent resignation of your office as our President, we, the Committee and Members of the Geographical Society of Bombay, cannot permit you to quit the shores of India without expressing our obligations for the warm interest you have invariably taken in the success of an Institution, advocated by your distinguished Brother, and which, under the auspices of subsequent Governments, and your own zealous and efficient support, has obtained a degree of credit, both here and at home, honorable alike to you, and the members of that service over whom you have presided with such advantage to this Society. Placed so favourably as are the Civil Service, the Military and Naval Officers, of India, to improve and extend the science of geography, it was imperative on us for the credit of our nation, that, with such fields of inquiry as are accessible to us on every side, we should not neglect opportunities of gaining information, or exhibit less activity in research than our country-men at home. In this path of emulation you have given us such cordial assistance, by so calling forth the energies and valuable contributions of officers in the Indian Navy, and those of your Civil, Military, and Commercial acquaintances, as to deserve our warmest thanks and especial regard.

All interested in the advancement of oriental navigation and commerce, must feel grateful that the officers under your command, and by your direction, have honorably distinguished themselves in their surveys of the Persian Gulf, Red Sea, Southern Coast of Arabia, the Maldives, the mouths of the Indus, the Chagos Archipelago, with the bank of Saba de Malha, part of the East Coast of Africa, and finally the Gulf of Manaar and Palks Bay, not yet completed.

In these undertakings you have amply fulfilled the promise, made in 1831, when you became our President, that you would use your utmost endeavours to secure the success of the Society and promote its objects. But your efforts to support us have not been confined to the Naval Service, as you have never failed to represent the claims of the Society to the patronage of persons holding high situations in this country, and powerful to give us aid. Of these we must mention your successful applications to Lord Clare, to Lord Auckland, and to our own late and respected Patron Sir Robert Grant, whose interest in this, as in all other useful institutions, was evinced by the numerous and most important benefits which his Government conferred on us.

To mark, therefore, how much the institution, which has now attained a healthy maturity, owes to your aid, we request you will do us the honor of accepting the situation of our Honorary President, and that, on your arrival in England, you will permit your portrait to be taken, that it may be hung up in the rooms of the Society, as a memorial of our being greatly indebted to you.

With warmest wishes for your future welfare,

We remain,

&c. &c. &c.

(Signed) D. Ross, *President*,

For the Members of the Geographical Society.

The following resolutions were unanimously agreed to:—

1st. That the address now read be adopted as expressive of the sentiments of this Society towards their late President; and in reference to the proposal of requesting Sir Charles Malcolm to allow his portrait to be taken for the Society, that the necessary sum be raised by voluntary subscription among the members.

2nd. That the thanks of this meeting be offered to Dr. Bird for the trouble he has taken in drawing up the address.

3rd. That Captain Daniel Ross, F. R. S. ~~be~~ elected President of the Society. \*

Captain Rose having consented to accept the office of President, it was proposed by Colonel Barr, seconded by J. Sindry, Esq. and carried, that a deputation, consisting of the President, James Bird, Esq. and the Secretary, be requested to wait on Sir Charles Malcolm, to present the address adopted at this meeting.

*List of Members of the Geographical Society, who have subscribed to the Testimonial to Rear Admiral Sir Charles Malcolm.*

Colonel T. Dickinson.	Lieutenant Geo. Fulljames.
Captain D. Ross.	John Graham, Esq.
Major O. Felix.	James Sindry, Esq.
Colonel D. Barr.	James Bird, Esq.
Captain R. Oliver.	James Little, Esq.
Captain J. Bonamy.	B. Noton, Esq.
Dr. C. Morehead.	H. Collins, Esq.
R. L. Leckie, Esq.	W. Edmond, Esq.
Lieutenant J. G. Forbes.	Captain J. Holland.
R. Smith, Esq.	T. W. Henderson, Esq.
A. B. Orlebar, Esq.	E. C. Morgau, Esq.
H. W. Morris, Esq.	W. S. Boyd, Esq.
C. McLeod, Esq.	J. P. Willoughby, Esq.
J. F. Heddle, Esq.	John Skinner, Esq.
Dr. James Burnes.	John McLeod, Esq.

\* This resolution was proposed by Dr. J. Burnes, K. H.

**XV.—Vocabularies of seven Languages, spoken in the Countries west of the Indus. BY LIEUTENANT LEECH, Bombay Engineers, Assistant on a Mission to Kabul.**

(Presented by the Hon'ble the Governor in Council.)

(The Committee, on receiving this paper from Government, have lost no time in ordering it to be printed, as they consider that, at the present moment, the possession of Lieutenant Leech's vocabularies may prove of great use to officers proceeding to the countries where these dialects are spoken.)

Dr. Bird has kindly added the explanatory notes which bear his initials.

**No. 1.**

**A VOCABULARY OF THE BARAKI LANGUAGE.**

*Introduction.*

The Barakis are included in the general term of Parsiwan or Tajik.\* They were originally inhabitants of Yemen, whence they were brought by Sultan Mahmud of Ghaznah and accompanied him in his invasion of India. They were pre-eminently instrumental in the abstraction of the gates of the temple of Somnath. There are two divisions of the tribe; the Barakis of Rajan, in the province of Lohgad, who speak Persian, and the Barakis of Barak, a city near the former, who speak the language called Baraki. Sultan Mahmud, pleased with their services in India, was determined to recompense them by giving them in perpetual grant any part of the country they chose. They fixed upon the district of Kaniguram in the country of the Waziris, where they settled.

There are 2,000 families of the Rajan Barakis, under Rasul-Khan who receives 2,000 rupees a year, from Dost Mahommed Khan. There are 300 families of the Barak Barakis, under Habib Khan, who also receives 2,000 rupees a year, from Dost Mahommed Khan. The contingents of both these chiefs amount to 50 horsemen, who are enrolled in the Ghulam Khana division of the Kabul army. There are also 2,000 families of Barakis at Kaniguram, under Shah Malik, who are independent. The Barakis of this place and of Barak alone speak the Baraki language.

We receive a warning from the study of this vocabulary not to be

\* The popular derivation of the word Tajik is, that the ancestors of that tribe were the keepers of the Taz (crown) of the Arabian prophet. Taz, besides meaning a kingly crown, is applied to the distinguishing cap of a Mussulman fakir.

hasty in inferring the origin of a people merely from the construction of their language, for it is well known, that the one now instanced was invented by Mir Yeusuf, who led the first Barakis from Yemen into Afghanistan. His design was to conceal and separate his few followers from the mass of Afghans (called by them Kash,) who would no doubt first look upon the Barakis with jealousy as intruders. The muleteers of Kabul being led by their profession to traverse wild countries and unsafe roads, have also invented a vocabulary of pass words.

## VOCABULARY.

1 Rosh	day	Goes	ear
Gha	night	Partook	trousers
Kalanak	boy	Khwash	sweet
Zarigag	girl	26 Turush	sour
Dadai	father	Tegh	bitter
Man	mother	27 Shor	salt
2 Khwar	sister	Tokha	hot
Marza	brother	Tsaka	cold
Wokh	water	28 Narm	soft
3 Aron	fire	Kilakha (kluk)	hard
Kikhan	bread	Pabeya	high
Kghar	city	Zaryia	low
4 Gram	villages	29 Tarrcekh	darkness
Ner	house	30 Angoor	grapes
5 Darakht	tree	31 Pukuk	ripe
6 Boota	shrub	32 Nakpukuk	raw
7 Yasp	horse	33 Sháká	horn
Gon	wood	34 Sumb	hoof
8 Yasp	mare	Palla	divided do.
9 Aoo	deer	Koush	shoes
10 Khar	ass	35 Kor	blind
11 Khatir	mule	36 Gung	dumb
Kurra	foal	37 Karr	deaf
Kirjee(chirg) Pus	fowl	38 Rash	straight
12 Kaftar	pigeon	39 Kaj	crooked
Konk	partridge	Stud	tired
Oogh(Oorkh) Pus	camel	Deemy	pain
13 Khirs	bear	40 Kaghaz	paper
14 Ahin	iron	Mushwanee	inkstand
15 Kalae	tin	41 Kalam	pen
16 Surb	lead	Chhá	well
17 Mis	copper	42 Ráh	road
18 Bering	brass	43 Nám	name
19 Tilla	gold	44 Zeen	saddle
20 Nukhra	silver	45 Giree	mountain
Gap	stone	46 Khisht	brick
Balk	leaf	Baba	grandfather
21 Pusht	back	47 Nawassai	grandson
22 Seena	breast	Khashna	sister-in-law
Nas	stomach	Pabeya	above
23 Lap	lip	Shadee	monkey
Geeshy	tooth	48 Bakres	goat
Makh	cheek	49 Nargosee	bull
Nenee	nose	50 Ganum	wheat
24 Tsimee	eye	51 Rizza	rice
25 Sar	head	52 Pyaz	onion

53	Tambakoo	tobacco	76	Máhee	fish
54	Shalgham	turmeric		Gáka	meat
55	Karam	cabbage		To, avee	sun
56	Turab	raddish		Marwokh	Moon
57	Kajar	carrot	77	Stoorá	star
58	Anar	pomegranate	78	Mashrik	east
59	Gulab	rose	79	Maghrib	west
60	Nimek	salt	80	Shammal	north
61	Tel	oil	81	Junoob	south
62	Shakar	sugar	82	Bád	wind
63	Khand	refined sugar		Parogh	light
64	Gud	molasses		Wavera	in
65	Nabat	sugar candy		Panekht	out
66	Mirch	pepper		Inda	here
	Run	clarified butter		Yawal	there
67	Maska	butter		Makh	before
	Wolkh	egg		Hapets	after
	Pikakh	milk		Razai	quick
	Gheep	curds		Karár	slow
	Topee	butter milk	83	Subuk	light
	Khat(kut) Pus	bedstead	84	Wazmeen	heavy
	Lyaf	coverlid	85	Khrab	bad
68	Kemet	dear		Shirra	good
69	Arzan	cheap		Narrai	thin
	Diree	hair		Ghota	fat
	Wadai	wool		Sturra	large
70	Pamba	cotton	86	Zaree	little
	Wroght	beard		Shoon	to-day
71	Broot	mustachios		Sar	to-morrow
	Málee	husband		Parán	yesterday
	Nák	wife		Kán	when
72	Dároo	gunpowder		Peree	now
73	Gwash	grass	87	Bas	enough
	Speg	barley		Shor	yes
	Ispeng	white	88	Na	no
	Soogha	red		Key	why
	Gharassa	black		Zub	much
74	Neel	blue		Dookh	little
75	Zed	yellow		Tar	and
	Gheen	green		Padze ma	below

## Numerals.

One	she	Thirteen	ghes	Sixty	khosht,
Two	do	Fourteen	t'sares	Seventy	hawai
Three	ghe	Fifteen	panzes	Eighty	haghtai
Four	t'sar	Sixteen	ghales	Ninety	niwee
Five	penz	Seventeen	hoves	Hundred	sad
Six	kjha	Eighteen	aghtes	Thousand	hazar
Seven	wo	Nineteen	hes		
Eight	aught	Twenty	jeest		
Nine	noh	Thirty	gheest		
Ten	das	Forty	tsaght		
Eleven	shandas	Fifty	panzast		
Twelve	duas				

Awal	Ar :	First
Dooyam	Per :	Second
Soyam	Per :	Third
Charam	Per :	Fourth
Pangam	Per :	Fifth
Shasham	Per :	Sixth



Haftam  
Hashtum  
Nowum  
Dasum

Per  
Per  
San  
San

Seventh  
Eighth  
Ninth  
Tenth

Razai, come — Tsu<sub>1</sub>go — Rawarra, bring — Aglona, take away  
— Gon, place — Oora, take up — Neh, sit — Hust, rise — Khuron, eat  
— gheea, give — Nassa, take — Dzana, beat.

Sentences.

Az sepae yum	I am a soldier,
Too gudaplo	Where are you going ?
Drekhy oghok	He spoke false.
Tostar makh marzaye	You are my brother.
Aza too dadad pitsen	We will go together.
Tar tuna rupee dāś	Have you a rupee with you ?
Tar too muwajib tsoona	What is your pay ?
Nimaz digar shuk	It is the time of afternoon prayers.
Ta tsun umuron	What is your age ?
Tsun Kalam daron	How many children have you ?
Baran rasak	The rain has come.
Tar toskgar tsum petsa	How far is your town ?
Tsun booma darom	How much ground have you ?
Yaspakee tsa ghai	What do you give your horse ?
Pa tsoona ghai ka	What is his price ?
Tafor dadai guda	Where is your father ?
She chan busak ba muluk	It is a year since he died.
Yaspdee to sarrang ar ghosh takai	How did you fall from your horse ?
Pera tsa kun	What shall I do now ?
Ta Shuj-al Malkee jangine tarmak	My brother was wounded in the bat-
marza zakhmee shuk	tle of Shujal Mulk.
Kurra Kariner bhoogh tsara na kun	Why don't you take care (what you
	do) in this office ?
Rahiner kuman ghal luchh da kun	A robber stripped me in the road.
Ta Kash khalk zud kurana kai	The Afghan is a starving nation.
Kurra graminer tsun khuran ganum	What quantity of wheat is produced
a ida	in that village ?
Tarma khamas bademee	I have a pain in my stomach.
Te Herat rahiner balad on	Do you know the road to Herat ?
Makh amarokh ka Kamran zuk zalim a	I hear that Kamran is a great tyrant.
Tsar penz sadaikee she yaspa skok	He gave four or five men for a single
	horse.
Kurra hous far tar tos tsun Kharchsha-	What expense have you incurred on
ka	that tank ?
Indadee basen souda aglon	What merchandise do you take from
	here ?
Tarra than kemat tar makh amezari-	The price of this piece in my opinion
ner padas tuman	is 10 tumans.
Kurra mulkaner khinkab kawan gran a	Why is khinkab so dear in this coun-
	try ?

Tar tosi Gireener hinc paida sa	Is assestida produced in your mountains ?
Ha shai bapatsa karraza	What is the use of this thing ?
Shon mulla hera, ghee, jactol shka	The mullas have all assembled in one place to-day.
Tar tosz abananer badala daha ki nagadaha	Are verses written in your language or not ?
Nak kok ka ba badala ghok pa Parsee baghok	No ! any one who rehearses verses, rehearses them in Persian.
Takash i menziner tsenzai shamsheeree a	What tribe of Kash (Afghans) are the best swordsmen ?
Ee Kashiner Popalzai sher shamsheer	Among these Afghans the Popalzais are the best swordsmen.
Sher maltagha pa toman Kandahar kisher meltagh nadga	This is a good gun, such are not procurable in all Candahar.
Tsunrosh bad Kafila raza	In how many days will the Caravan arrive ?
Tar makh utarak ta char sookh Karawansarai shuk, mebayad she war kamakh tamaner razai	I have put up in the caravansera of the Charsookh (four bazars) ; you must come and see me some day.

*Note by James Bird, Esq.*

The tribe of Baraki, who inhabit the country about Loghar, N. E. of Ghaznah, are, on Mr. Elphinstone's authority, usually called Parsiwan or Tajik, a name which is loosely applied to all persons mixed with the Turks or Afghans. The name of Tajik—would appear to be applied as a designation of the citizens of towns generally : but is also the Arabic denomination for the inhabitants of any country beyond the limits of Arabia, in which sense it is applied to those of genuine Persian descent, or to Arabs born in Persia and is used in contra-distinction to Tazi, the appellation for an Arabian. Judging from the structure of the Baraki language, we may infer that the Barakis, if Arabs brought into the country by Mahmud of Ghaznah, must have adopted the Persian language to the exclusion of their own, or that they are of pure Persian descent. The last appears the more natural conclusion, as more than one third of their language is Persian mixed with a small proportion of Sanscrit, Pushtu, and Arabic terms. The cognate words of these several languages have been in part inserted, and the similarity of the Baraki and Persian ordinals marked. Some discrepancy in the numerals of the two languages appears to exist ; but this is more apparent than real, and has arisen from the fondness which the Afghan evince to change adopted words from Persian into the sound of their own language, as zh into g, and sh into kh. In this manner the Persian sih — or three becomes ghe, and the Sanscrit chha is permuted to kjha. Some of the remaining words of the Baraki

language, for which cognate ones are not found in Persian, Sanscrit, Pushtu or Arabic, probably belong to the old dialect of Persian, named Zaveli, which was the language of Zabulistan, and one of the four Persian dialects, enumerated by the Farhang Jehangiri, which belonged to the provinces east of the Persian desert.

The emigration from Yemen, mentioned by Lieutenant Leech, probably never took place; and what has been ascribed by tradition to Mahmud of Ghaznah, appears to have been effected by Sultan Shehabuddin, who is more commonly known by the name of Mohammed Ghauri. The following extract from Dr. Dorn's translation of Neamet Ullah's History of the Afghans, seems to explain the emigration alluded to in the introduction:—

“It was some time after this, that Sultan Shehabuddin ordered Melik Moezz Uddin, one of his Omras, to remove the whole of the Afghans from the mountainous districts of Ghor, and to settle them in the mountains about the residence of Ghazneen, that they might prove the guardians of the seat of empire, and check the infidels about Hindustan. In concurrence with his instructions, Moezz Uddin prevailed upon all the Afghans to move from the Kohistan of Ghor, and to take up their abode in Koh Suleiman, Ashnaghur, and the territories of Bajour, from the frontier of Kabul to the Neelab, and from the districts about Kandahar to Multan.” J. B.

## No. 2.

### A VOCABULARY OF THE PASHAI LANGUAGE.

#### Introduction.

This language is spoken by the people called Pashais, who inhabit the district of Mandal, Chitelá Parená, Koondee, Sewá, and Koolmán.

#### VOCABULARY.

1 Dawás	day	she	Per; S	Six
2 Ast	hand	sat	Per; S	Seven
Laonee	girl	aght	Per; S	Eight
Pánjai	man	no	Per; S	Nine
3 Aee	mother	de	Per; S	Ten
4 Sáyá	sister	Gal		river
5 Angár	fire	Soata		he-goat
Láni	fort	Barátek		ewe
6 Kadee	tree	Láwgá		puin
7 Ghodee	mare	9 Dár		wood
8 Batar	bad	10 Dároo		powder
ee	One	Vyál		night
do	S Two	Bálákool	S	boy
te	S Three	11 Zaif		woman
char	Per; S Four	Tátce		father
panj	Per, S Five	Laya		brother

12	Wark	water	Agahdee	apricot
	Chagam	chin	Manai	apple
13	Manda	neck	.Oba	upon
14	Makadik	monkey	Ebat	now
15	Pa	foot	Pachale	cooked
	Náwad	back	33 Shee	horn
	Kooch	belly	Wra	stand
	Gorecha	embrace	34 Pe	•drink
	Ser	head	Aoo	bread
	Khwágen	near	35 Goshni	house
16	Ghlek	white	36 Ghoda	horse
	Soonek	red	Bai,ee	good
	Kachá	blue	Phájadik	she-goat
	Khát (Pus)	bedstead	37 Barata	ram
17	Noonce	butter	38 Gal	abuse
18	Are	flour	Wágan	wind
	Goláng	drove of bullocks	Paroutik	bullet
	Ada	bull	39 Mo	wine
	Zaib	wife	Chán	vinegar
	Pulteni	son	jás	Eleven
	Selt	knife	duás	Twelve
19	Sonezarra	gold	tloe	Thirteen
	Wád	stone	chaddo	Fourteen
20	Nast	nose	panjoo	Fifteen
	Door	lip	ghod	Sixteen
21	Jib	tongue	sattoo	Seventeen
22	Broot	mustachios	aghtoo	Eighteen
	Kalavee	cheek	na'oo	Nineteen
	Ling	leg	vist	Per : S Twenty
	Jeghta	ruler	40 Gom	wheat
	Ang	arm	41 Lon	salt
23	Seena	breast	42 Ga	cow
	Sadal	cold	43 Ghás	grass
	Gand	large	Páng	husband
24	Lagar	thin	Wayá	daughter
25	Perana	coat	Chummár	iron
	Kunakik	cloak	Shlek zarrá	silver
	Shuwatik	bitch	44 Aneh	eye
26	Machh	fish	Khád	ear
27	Kharta	ass	45 Dán	tooth
	Lawich	jackall	46 Dadee	beard
28	Chappa	left	47 Choochadik	paps
29	Nirgich (Tur)	sunset	48 Kachee	armpit
30	Mei	moon	Dooe	face
	Tal	heavens	•Dudá	far
31	Fem	snow	46 Sámek	black
	Asal	hail	50 Pelá	yellow
	Lad	false	Aleená	green
	Eam	little	Chal	hair
	Po	dust	51 Chouta	small
	Bhojeel	earthquake	Bakuta	fat
	Kan	arrow	52 Cheela	cloth
	Khat	scabbard	Sutan	trowsers
	Soochak	needle	53 Ghuneem	dog
	Kumar	deep	Oudarik	cat
	Lassara	sweet	Pe	flesh
32	Garm	hot	54 Khartee	female ass
	Peenja	flower	55 Dashná	right
	Dashik	grapes	56 Sur aldash	sunrise

57	Taj	star	Kura pages	where are you go-
	Sang	earth		ing?
	Wagh	rain	Toochoolesai	where is your resi-
	Sidal	ice		dence?
58	Rast	true	Sabak mare	learn your lesson
	Bo	much	Aoo pochale	cook bread.
	Sila	mud	Wargacha	bring water.
59	Abalee	cloud	Likhan keya	write.
	Khurra	hoof	Ema sardar	who is your ruler?
	Boonta	bow	Kya3	
	Pachh	cotton	Viramboos	walnut
	Yoal	wool	61 Baho	quince
	Sai	thing	Anarik	pomegranat
	Tees	bitter	62 Akhud	below
	Ledhee	female deer (roe)	Pachada	after
	Hadaga	language	Kham	raw
	Tena	thirst	Tada	deer
60	Anda	blind	Aota	hunger
	Goonga	dumb	Koghada	shoes
	Beda	mad	Bolla	deaf
	Unnai	come	" Khota	lame
	Nepa	sit	63 Chaya	well
	Aya	eat	Witar	go
	Amlaja	run	Low low jhala	go slowly
	Tena namase	} what is your name?		
	Kusi			

## No. 3.

## A VOCABULARY OF THE LAGHMANI DIALECT.

*Introduction.*

Laghmán is a province (mahál) of the principality of Kabul, situated opposite to Jálálábád; it is sometimes written Lamghan. — It yields a revenue of 1,13,000 Rupees, and is included in the government of Mahommed Akbar Khán, the favorite son of Ameer Dost Mahommed. The inhabitants of Laghmán are Tájiks or Pársiwans.

This language has two letters peculiar to it alone; the first is a sound between the Persian Lam and Alif, which I have expressed by *A*, and the second a sound between Khe and Wào which I have expressed by *k h*: it is pronounced from the left side of the mouth. The Arabic Zal — I have as usual expressed by *th*, and the Persian Se—by *th*.

## VOCABULARY.

Lae	day	5 Katce	tree
1 Atth	hand	Bakár	good
Kitálik	girl	ee Per :	1
2 A,'e	mother	Do Per :	2
3 Sáýá	sister	be Per : S	3
4 Angár	fire	char Per : S	4
Lam	fort	panj Per : S	5
Bábá or tatiýá	father	khe Per : S	6
Layá	brother	that H.	7
Warg	water	akht Per : S	8
A,'oo	bread	no Per : S	9
Goong	house	de Per : S	10

Nandee		river	Kana	deaf
Shotik		she-goat	Kuta	lame
Iáwçgá		pain	Pateek	gone
Lodee		wood	31 Mae	moon
Noonee		butter	32 Wakh	rain
Are	P.	flour	33 Able	cloud
Goláng		bull	34 Sum	hoof
6 Gás		grass	Packha	cotton
7 Adam		man	Sona	thread
Panj		husband	Shamek	murch
Shelt		knife	Arookh	leek
8 Swran		gold	Ko	thing
Vell		night	Shireen	P. sweet
Bala Kool		boy	35 Shidal	cold
9 Ookht		lip	36 Pachadak	he-goat
10 Jeeb		tongue	37 Ghora	horse
11 Broot		mustachios	38 Nakar	bad
Ast		arm	yac	11
Kuchh		belly	dua,'e	12
12 Door		far	senzda	Per. 13
13 Shamek		black	chadde	Per. 14
14 Thard		yellow	panjoo	Per. 15
15 Neel		blue	shanza	Per. 16
Chal		hair	sabda	Per. 17
Gand		large	hasnda	Per. 18
Sanna		thin	huzda	Per. 19
Liga		tall	vist	Per. 20
16 Peranik		coat	39 Gal	abuse
Kkada		turban	40 Wagan	M. wind
Peshoondik		cut	41 Goolee	P. bullet
Pe		meat	42 Goni	S. wheat
Karatik	P.	female ass	Lon	S. salt
17 Sheer		head	Ga	P. cow
18 Nonkh		nail	Mashee	woman
19 Chap		loft	Tik	wife
20 Drogh		false	Pultem	S. son
Kun		little	Chunmar	iron
Manda		neck	43 Nuklira	silver
21 Bahgal	P.	armpit	Wnd	stone
Pindee		calf	44 Natht	nose
Anch	S	eye	Pa,'e	P. leg
Kad		ear	45 Chan	back
22 Dán	S.	tooth	Poda	near
23 Lad	S.	beard	Kick	white
Ganibá		deep	Shoonek	red
24 Pyaz	P.	onion	Allena	green
Pákec		razor	Kat	bedstead
Soochik		needle	Chantala	small
25 Jarm	P.	hot	Chagh	fat
26 Khargosh	P.	hare	Muta	short
27 Bar	P.	fruit	46 Kala	P. cloth
Akude		below	47 Sutan	trowscrs
Dura		out	48 Khudeenk	dog
Pam		brond	49 Machh	fish
28 Kamag	P.	bow	50 Kar	Per. S. donkey
29 Kham	P.	raw	Door	face
30 Janawar	P.	beast	Door	mouth
Limbe		tail	51 Rast	P. true
Pethar		shoes	52 Rast	P. right
Tuna		thirst		

53	Bo	S.	much	62	Pacheek		crooked
54	Shana		shoulder	63	Paranaga	P.	bird
	Allakh		side	64	Shakh	P.	horn
55	Ran	P.	thigh	65	Kalacha		speech
	Sang		earth		Aofa		hunger
	Shila		myd	66	Anda	S.	blind
	Thoor		suh	67	Gunga	Il.	dumb
59	Doom	S	smoke	68	Chha		well
57	Zalzala	A.	earthquake		Aik		come
68	Gilaph	A.	scabbard	1	Pakam		1 go
59	Pasham	P.	wool	2	Pakai		dost thou go
60	Pul	P.	flower	3	Paga		he goes
	Ude		upon	4	Pakath		we go
	Kutchai		in	5	Pakatha		ye go
	Liga		long	6	Pakan		they go
61	Teer	P.	arrow				

## No. 4.

## A VOCABULARY OF THE KASHGARI (PROPERLY KASHKARI) LANGUAGE.

Dak	a boy	Obista	dend
1 Moashee	a man	Zoom	mountain
Lesoon	a cow	5 Ingar	S. fire
Astor	a horse	Chohistam	I am hungry
Ashpai	a sheep	Isligum	shall I eat?
2 Unth	S. a camel	Musamloodath	speak with me
Chhaneo	hair	Kisit	waist band
Pusha	cat	6 Perahan	P. coat
Een'ch	forehead	Anjam	put on (imperative)
3 Naakar	S. nose	Chale but	a fat man
Baroop	eyebrow	7 Hast	S. hand
Ghon	lip	Mujastco	calf of leg
Legeen	tongue	Mah	waist
Bugha	begone	Paz	breast
Roopa	get up	Boom	P. earth
Pe,a	S. drink	8 Gumod	a girl
Dassa	take	Kumcedec	a woman
Oogh	water	Deshawa	a bull
Gomb	S. wheat	Ghoddoo	S. an ass
ee	1	9 Pai	a goat
joo	2	Postam	P. wool
tro,ee	P. S. 3	10 Rain	dog
chod	P. S. 4	11 Soor	P. head
poonj	P. S. 5	Kad	ear
choo,ee	P. S. 6	Ghach	cye
soot	P. S. 7	12 Reekish	P. beard
ausht	P. S. 8	13 Dond	P. tooth
nenham	P. S. 9	14 Ege	come here
jash	10	Hishik	sit down
jishi,e	20	Ejube	eat
seo jhoon	100	Math with	give me
asman	P. heaven	Mashrba	goglet of water
Gheed	milk	Shapeeka	bread
Chho, ee	day	15 Karing	rice
Dashmanee	reading	Seeree	barley
Auge	come	16 To keenee	who are you?
4 Ghareeb	A. poor	Chadooc	turban
Jeel	veil		

Phadwul	tro\ sers	Ilagheed	curds
Chhan	take off (imprae- tive)	Paniya	night
Bizwa	thin	Dashmaneera	read
17 Pong	foot	20 Metal	a great man
Shurak	thigh	Mawlat	country
Khwanoo	belly	Kosh	shoes
18 Goul	neck	21 Jeen wa,cc	born
19 Jind	bedstead	Ult	round
Satare P	stars	Him	snow
		Jin	wood

*Note by James Bird, Esq.*

The three preceding dialects, called Pashai, Lughmani, and Kashkari, are evidently cognate with languages of a Sanscrit origin and Hindu stock. They are spoken in three districts situated between the Kabul river and southern face of the Hindu Kosh. The Pashai, according to Captain Burnes, in his account of the Shahposh Kaffirs is spoken in eight villages—1 Leshkein, 2 Leshkein, 3 Sondur, 4 Alisye, 5 Ghyu, 6 Doornama, 7 Dura 1 poota, and 8 Mulaikir, situated among the seven valleys of Nijrow, westward of Lughman, which embrace the territories watered by the rivers of Oozbeen, Alishung, and Aligur. Kashkar is more to the northeast, on the river anciently named Gurceus, between which and the Cophenes, or river of Kabul, Massaga, the capital of the Assaceni, appears to have been situated. The dialect of Kashkar has less affinity with that of the Kaffirs, than the Pashai or Lughmani dialect, but all must have had a common origin in a Sanscrit Persian language, which was probably the Zend, with which some Pehlvi or Arabic words, such as *age*, *mishrabu*, and others are occasionally found intermixed. The Pashai language is particularly interesting, as connected with the name of a people, the Pasiani, who with the Asii, the Tochari, and Sacarau-li overturned the Greek kingdom of Bactria about one hundred and twenty-five years before Christ.

The valleys of Nijrow, Panjhir, and Ghoreband, form the Kohistan of Kabul, and formerly with Bamian, were included in the country of Ghaur, as we are told by Ibn Haukal, who wrote his geographical treatise in the middle of the tenth century of our era. At this time it was inhabited by infidels, the same people probably as the Kaffirs; all the country eastward of Ghaur was esteemed as belonging to Hindustan, and the Ghaur language is said to have resembled that of Khorasan.

The districts, in which these languages are spoken, are known to the Arab geographers by the name of Baltan, and subsequently by that of Little Tibet. They are called, by Marco Polo, Basia, the



people of which had a peculiar language, which appears to have been the Pashai. The people worshipped idols and were of dark complexion. Masaudi, in the middle of the 10th century, speaking of Baltan, "says this is an extensive country, known as the kingdom of Firoz the son of Kibak, in which there are wonderfully strong forts; various languages and many people, who differ about their genealogies; some saying that they are descended from Yafeth, the son of Noah, and others that they derive their lineage from the ancient Persians in long descent."

## No. 5.

## VOCABULARY OF THE LANGUAGE SPOKEN IN THE HIGHLANDS OF DEER.

Pand pisha, show the road;—choo ain pand, go this road;—poochde, give a kiss;—buchha kot, I am hungry;—maya, dont;—dat, full;—shilcha olt, I am thirsty;—paireth, money;—bal, hair;—jath, wool;—ghat ag, whence have you come;—andeghtag, I came thence;—andeghkeechon, I will go there;—jib, tongue;—angyoor, finger;—masht, throat;—moolkanth bying ghalcet, will you sell;—gheed, milk;—maya, curds; chot, cheese;—bat, rice.

1 Mulland	M. S. dead	Yak	1
2 Pedah	S. ill	Do	2
3 Keehoo	H. take away	Ghta	3
4 Pacha	S. cook (imperative)	Chor	4
Goil	bread	Panch	5
5 Meesh	S. man	Jho	6
6 Kha	H. eat	Shat	7
Shaya	come	Hasht	8
7 Beh	H. sit	Nob	9
Jola	speak	Dagh	10
8 Ga	S. cow	21 God	S. horse
Gad	clarified butter	22 Gou	S. bull
Mail	butter milk	Teekod	girl
Choud	writing	23 Mekide	S. give me
Chantoo	alive	Ruit	might
9 An	S. bring	Chail	goat
10 Gal	S. light (imperative)	24 Birboor	P. tiger
11 Pisht	flour	25 Gomb	S. wheat
Wahe	water	26 Mas	S. meat
Ees	women	Noil	cap
12 Po	S. drink	Shah	put on (imperative)
13 Chou	S. begone	27 Yar	P. friend
14 Uthee	S. get up	Jar	fight
15 Poo	S. son	28 Mar	P. S. kill
16 Gheen	M. S. take	Taran	forehead
17 Doos	S. day	Doodh	lip
Rouns	musik deer	Dair	chin
Sheermukh	hyena	Kkasha	check
Yoo	S. P. barley	Thoho	hand
Gujur	clothes	Jang	calf or leg
Sheerbal	trowsers	Gabeet	arms
19 See	S. sew	Jola	speech
20 Gkaleem	M. enemy		

Migar	joy	Eeka	11
29 Archhee	S. eye	Beyaha	12
30 Nistoore	S. nose	Gheltaha	13
31 Kan	S. ear	Choha	14
Dand	tooth	Panchee	15
32 Sheesh	S. head	Choud	16
Khoo	foot	Sataha	17
Erkas	breast	Hashtaha	18
Oos	strike	Unbees	19
teenng	back	Bees	20

*Note by James Bird, Esq.*

Deer, which is situated north of Bajour, and on the Panjora river, was, at the time of Mr. Elphinstone's visit, the capital of Kassim Khan, chief of the Mulleezyes, a branch of the Afghan tribe of Eusofzye, who, for three hundred years have possessed the countries on the upper parts of the Indus, and are said to have been originally emigrants from the country of the Belooches about Kelati Nassir. The language spoken by the hill tribes of this district appears to be a dialect of Hindee, containing Sanscrit and Persian words, and is probably more modern in its origin than either of the preceding dialects.

#### No. 6.

#### VOCABULARY OF THE TIRHAI DIALECT.

##### *Introduction.*

The Tirhai language is at present confined to 3000 families who abandoned their own country, the district of Tira, on a feud breaking out between the Arabzais and Afreedis, and settled in the province of Ninganhar. They figured in the religious revolution I am now about to mention.

In the reign of Akbar, when Mirza Hasn was governor of Kabul, a holy man by name Hisamodin, an Amsari by caste, came from Hindustan, where his forefathers had been left by Tamerlane, to Afghanistan; in which country he travelled and preached, and had succeeded in making many converts to the creed of the Shiah to which sect he belonged; when Akhun Derveza, whose shrine is now at Peshawar, arose as his opponent and as the defender of the orthodox faith of the Sunnis, Hisamodin had obtained the title of Pir Roshan (Father light) among his own sect, and that of Pir Tareek (Father darkness) among the Sunnis. Akhun Darveza petitioned the king who gave orders to the Governor of Kabul to co-operate with him in exterminating the infidel Shiah. These two laid many snares

to entrap their opponents, who evaded their pursuit, accompanied by a body of 200 cavalry who reversed the shoes of their horses. He escaped and his fate is not known, but his three sons were secured and put to death. The labors of Pir Roshan were particularly successful in the districts of Tara where he had 60,000 disciples, who on the disappearance of their preceptor returned to their former belief

	Kuzra		horse
	Bhadai		mare
	Palee		bread
1	Wa		water
	Seenth		river
2	Das		day
3	Rat		night
4	Beer ookh	S	he camel
5	Streery ookh	S	she camel
	Boero tsinda		he goat
	Streecy tsalee		she goat
	Ghwar		good
6	Nakar	P	bad
7	Ghodee	S	abuse
8	Balee		wind
9	Nar	A	fire
	Lada		wood
	Brekhh		pain
10	Tarwalce	S.	sword
11	Dal	H.	shield
12	Golai	P	bullet
13	Dudh	S	milk
	Kuchh		butter
14	Gaah	S	clarified butter
15	Ghom	P S	wheat
16	Zao	P S	barley
17	Lon	S.	salt
18	Go	S	bullock
	Baga		near
19	Door	P S	far
	Parranna		white
	Lukee		red
	Zuad		yellow
	Kangana		black
	Sen		bedstead
20	Bal	S	hair
	Stoda		little
	Ghana		large
	Plan		fat
	Soom		thin
	Kathan		short
21	Driga	S.	tall
	Taabar		cloth
22	Peeran	P	coat
	Sathan		trousers
	Phagda		turban
	Sana		dog
23	Bilolee	S.	cat
24	Mahai	P	fish
25	Khar	P	donkey
26	Moon	S	face

	Azee	S	mouth
27	Mas	S	meat
28	Nukh	S	nail
	Azoi		right
29	Chap	S.	left
	Tauk		little
30	Dhen	S	cow
31	Ghas	S	grass
32	Streecy	S	wife
	Mhahala		father
33	Ma	S	mother
34	Putur	S	son
35	Kumar	S	daughter
	Spaz		sister
36	Bhra	S	brother
37	Kataree	S	knife
	Tsembar		iron
	Zyad		brass
	Postaka		leather
	Perannazar		silver
	Luhet zar		gold
	Bat		stone
38	Achha	S	eye
39	Nasth	S	nose
40	Kan	S	ear
41	Ghunda		lip
42	Dada	S	tooth
43	Jibba	S	tongue
44	Dadce H M		beard
45	Bret	S	mustache
46	Hast	S	hand
47	Pa		leg
	Tsat		back
	Damma		belly
	Brokh		much
	Oga		shoulder
	More		neck
	Allakh		side
	Khary		armpit
	Room		thigh
	Poonder		calf of leg
	Breech		tree
	Bhoom		earth
	God		mud
	Dooda		dust
	Spognai		moon
47	Soori	S.	sun
48	Barsat	S	rain
49	Dhoong	S	smoke
	Ooryaz		cloud
50	Zalzala	A	earthquake

Gkwar kand	thunder	59 Pakka	S.	crooked
Tander	thunder bolt	Ama		raw
Padakahar	lightning	60 Rassai		rope
Noekh	hoof	Lakai	S.	tail
Haoza	hilt	Udhast		hunger
Tekai	scabbard	Gushthane		house
Malooch	cotton	Tandrai		mouse
Pam	wool	Kindwanec		water melon
Ooj Goonee	goats hair	Ragha		plain
Zmarrai	tiger	Kharga		crow
Googh	deep	61 Morgha	Per	bird
Kangana mirch	black pepper	Khka		horn
51 Soom	leek	Phanai		shoes
Pyaz	P. onions	Peeratha		thirst
Kurkumand	saffron	Osai		deer
Spansee	thread	62 Ku, ai	S.	well
Byatai	scissors	63 Ghar	S.	mountain
Katarce	razor	Blana		plate
Shai	thing	1	P. S.	eek
Dhoong	needle	2	P. S.	doo
Mrikht	sweet	3	P. S.	tra
Tre	salt	4	P. S.	tsor
Trikht	bitter	5	P. S.	pants
Latta	hot	6	P. S.	kho
Shhal	cold	7	P. S.	sath
Sawe	hare	8	P. S.	akht
Buroo	wolf	9	P. S.	nap
52 Geeded	jackal	10	P. S.	dah
Yaya	bear	11		eeko
Beezo	monkey	12		bo
53 Ath	flour	13		tro
54 Gul	P. flower	14		tsonda
55 Bar	P. fruit	15		panzee
56 Phalla	S. grain	16		khod
57 Drig	S. long	17		sato
Plan	broad	18		akhto
Ghasha	arrow	19		kunnai
Gkurr—Kaman	bow	20		bhya
58 Rast	Per. true	30		bhyonda
Dreest	false	40		doo bhya.

*Note by J. Bird, Esquire.*

The district of Ninganhur, called by the Emperor Baber, Nangnihar in which the Tirhai dialect is spoken, is situated along the Kabul river on the South, and is the Nungnehaura of Mr. Elphinstone's map. In the time of Baber, it was the largest of the *purgana's* or *tuman's* of the Lamghanat, or Lughman; and lies on the north of the Tira range of mountains, which separate the valleys of Kohat and Peshawar; and commencing at Attock, run from the Indus, in a westerly direction, till they reach the Kohi Safid. The Tiryes, says Mr. Elphinstone, who live in the Shainwari country are a small tribe, only remarkable from their speaking a language distinct from those of their neighbours. He was not able to procure a

specimen of it; but from the vocabulary of its words, collected with much care and assiduity by Lieutenant Leech, we are enabled to refer it to a Sanscrit, or Hindu source mixed with a considerable number of adopted Persian words, to designate the names of objects, which from necessity, were least embodied in language and familiar to the mind. The same permutation of letters is observable in this dialect as in Sanscrit; and d and r frequently alternate with l and vice versa. Some Maratha terms in this and the three preceding dialects are met with, and rather appear to have been introduced into the language than to have formed an original part of it. Others of its words are from an unknown root. The tradition however which assigns the Tirhais the same origin as the Hindkis, appears to be a correct one.

## No. 7a

## VOCABULARY OF THE MOGHAL AIMAKS.

*Introduction.*

The *Moghals* are one of the four Aimaks who inhabit the country of Baghian and Marigan; the former is subject to Kandahar, the latter to Herat.

A story is told that one of the kings of Persia sent for a Moghal Aimak to inquire the structure of his language, and was so disgusted with the discordancy of its sounds that he ordered the man to be killed. While the executioners were preparing to strike off his head, the king to give the culprit a last chance, inquired the Moghalee for face; the man answered (noor), which in Persian signifies light. This lucky answer, it is said, saved the credit of the Moghal language, and the head of its propounder.

1 Odwe	Mon : day		Nakcheer	P. deer
2 Sonnee	Mon : night		eljigan	ass
Naran (the sun)	M. warmth	↳	Murgh	fowl
Ghar (Gar)	Mon : hand		Teman (teman)	M. camel
Kuon	Mon : boy		Watage (utege)	M. bear
Wokin (okin)	Mon : girl		Bizoo	monkey
Baba (Bala)	Tur : father		Cheena	wolf
Bo,e	mother		Nokai nokoi	Mon : dog
Turuksan	brother		Buz	P. goat
Khwar	P. sister		Saghal (Sakal)	Mon : beard
Ussun (ussun)	Mon : water		Saghligh	sheep
Ghar (Gal)	Mon : fire		Ukan (ukir)	bull
Ukpang	bread		Weena (une)	Mon : cow
Shahar	P. city		Tughal (tugul)	Mon : calf
Deh	P. village		Kalan (kelen)	Mon : tongue
Darakkt	P. tree		Kelan (keleku)	Mon : speech
morin (morin)	horse Mon ;		Kala	chain
Morin	mare		Kujunu	neck

Undun		trowsers	Suddun		tooth
Gasoo (aire-usu) M.		hair	Ghajar (gasar)		plair
Kilgasoon		wool	Khisht P.	brick	
Malghai		cap	Kkirma	hut	
Naka		shoes	Oda	above	
Khatun Per.		woman	Shewa	below	
Girr		house	Dunda	in	
Koe		breeche's tie	Ghadana	out	
Konghan		light	Eendar	here	
Saman		grass	Teendar	these	
Ulan (ulan) M.		red	Jaola	before	
Chagh		white	Koma	after	
Koka		green	Water	quick	
Kara (chara) Mon :		black	Khoob P.	good	
Sheera (aira) Mon :		yellow	Bad P.	bad	
Mor		road	Modar	to-day	
Burghaja		cooked	Uckedar	yesterday	
Kham P.		raw	Unutar (antaku)	sleep	
Oula		blind	Kooree	stone	
Lang		lame	Modun	wood	
Ukuba (ucube) M.		death	Keja	when	
Ebat		pain	Khana	where	
Neera		name	Enaka	now	
Chah		well	Bas P.	enough	
Yamal		saddle	Han H.	yes	
Kulpa S.		plough	Ogai	no	
Oula (bajan-ula) M.		hill	Yema	why	
Bughda		wheat	La Ar	not	
Arpa (arbai) Mon :		barley	Be	I	
Ghurul		flour	Chee	thou	
Chighan		rice	Te	he	
Anar P.		pomegranate	Ekeda	many	
Angoor P.		grapes	1 Nikka Mon :	nige	
Pyaz P.		onion	2 Koyar Mon :	gojar	
Seer		leek	3 Ghorban Mon :	churban	
Zardak P.		carrot	4 Darban Mon :	durban	
Dapsung (dabasun) M.		salt	5 Tabun Mon :	zabun	
Tosoon		clarified butter	6 Jolan Mon :	durchochar	
Khageena		egg	7 Jurghan Mon :	dolochun	
Sunu (su) Mon :		milk	8		
Tarakh		curds	9	Informant	
Unda		butter milk	&ca	deficient	
Kajar (gasar) Mon :		earth	&ca		
A hin Per.		iron	Eera	come	
Surab P.		lead	Eeda	eat	
Tilla P.		gold	Buz	rise	
Bring P.		brass	Barre	catch	
Nukhra		silver	Bae wawla	dont cry	
Ghimsoo		nail	Geuelga	run	
Kull		foot	Ap	take up	
Ekin		head	Omaz	put on	
Gesal (gesu) Mon :		belly	Orchee	go	
Chakin		ear	Son	sit	
Kabr (kabar)		nose	Hug	beat	
Noor		face	Kala	kill	
Nuddun (nudun)		P. eye	Talee	put	
			Nunoo	mound	

Namchee yama bee	What is your name?
Kedoo turuksan betar	How many brothers have you?
Koun indai eera	Come here boy.
Bazar too korchee-woonla chara bis- ando	Go to the Bazar and bring me some milk.
Malghar now yemaqaja	} Why don't you wear a new cap?
low masuninchee	
Kanour che nautar	Where are you going?
Ga buz	Rise early.
Ghar menee ebatanna	My hand pains me.
Umur tany kedo sal be	How old are you?
Indasa ta Kabul kedor morhe	How far is Cabul from this?
Orda-mance-koyar rupce	} I have two Rupees left.
Kochurpa	
Katai manee neramee Haleem Jan be	Haleem Jan is the name of my chief.
Mornee tancee keematnee kedoo	What is the price of your horse?
Indasa ta Farrah monce kiramee	What is the hire of a horse from this to Farrah?
Keedo be	
Bapatancee amduna be	Is your father alive?
Amdan ogai be ena ghorbansal leek- ee oknya	He is not alive, he died 3 years ago.
Turuksan manee tancee nantar	Do you know my brother?
Changhan Bulja saghal manee	Your beard has turned grey.
Bidasasai Tum gajee kaskuda janta	Why are you angry with me?
Nazar toomee neeran ki mode barish ecknia	It looks as if it would rain to day.
Agar chee khlas ugai bechee turuk- san raiket	If you are employed, send your brother.
Nika adurton kedo morochee nanta	How far can you go a day?
Walka satancee into ba reena	How are you taxed in your country?
Mornee yamal eeki unusuma	Saddle the horse that I may take a ride
Odwi bega burja boz ki warehi ena	The day is far spent, rise and let us go
Beeda eera lubdakhismat lootance ena- uka rukhsat ketona kiwarch ya geertuna	I came to wait on you, now give me leave to go home.
Dundadoo manee kudal beyagaga	Let there be no deceit between you and me.
Oordooce dundanyoo awaza bila ki Mohammed Shah oak'n jana	There was a report in the camp that Mahommed Shah was dead.
Elegance inance uchkan sonce kula- ghai achukanna dai sumee kathair yatka janna	Yesternight a thief stole an ass of mine by cutting his leather.
Nikka Inchman belatancee elgiganeen	The thief stole also an ass of a guest of mine.
Kulaghai achichana	

### Notes.

The Aimaks and Hezarahs inhabit the western branches of the Paropamis mountains, southeast, of Herat, from which issue the

rivers Farrah-rud, Khushkrod, Girishk, and Hirmand. The former whose name is the common Turki designation for a tribe, lead a pastoral life and live in camps called Oard. Mr. Elphinstone says that their features would refer them to a Tartar stock while tradition traces their origin to the Moghals. A comparison of the radical words in their language with those furnished, by Klaproth, in his vocabularies of the Moghal dialects, satisfactorily establishes the correctness of this opinion. They are said to be the remains of the Chaghtai army sent, by Mangukhan the grandson of Jinghiz, to the assistance of Holaku Khan under the command of his son Nicodar Oghlan : and at the time of their original settlement appear to have been infidels who had a high priest worshipped like an idol. At this time the real Afghans were already Mohammedans ; and both Aimaks and Hezarahs seem to have no better claim to the designation of the Afghans than have the Sewatis, the Fermulis, and others, who reside in the neighbourhood of the Afghans

I. B.

*Remarks on the origin of the Afghans.* By James Bird, Esq.

The descent of the Afghans is a subject which has employed the pens of several distinguished writers, and though Sir William Jones, led away by the Mohammedan accounts of their origin, concluded that they were descended from the Jews, there appears to be no better foundation for this opinion than tradition. Dr. Dorn, in his translation of Neamet Ullah's history of this people, has given copious annotations, supported by the authority of Mohammedan history, to shew that the Afghans were originally a Turkish or Moghul nation. An examination of the preceding dialects justifies us in thinking that they were a mixed race, consisting of the inhabitants of Ghaur, the Turkish tribe of Khilji, and the Perso — Indian tribes, dwelling between the eastern branches of the Hindu Kush and upper-parts of the Indus. So early as the beginning of the tenth century of our era, Ibn Haukal tells us that in many places about Ghaur there were Mohammedans, while it was mostly inhabited by infidels and that its dialect was like that of Khorasan, in which province it was sometimes included, along with Bamian and Penjhir. The language of its people would appear to have been the *Herzi* dialect of Persian, of which the Pashai and Lughmani are the probable remains. If therefore, as generally thought, the inhabitants of Ghaur were the ancestors of the present Afghans, they belong to the same great fa-



mily of nations as the Germans and the Indians ; and with them Arab, Turkish, and Moghul emigrants were 'subsequently, incorporated.

Their original country including the Paropamisus was known by the name of Roha, or Rohaj, which was a town in the neighbourhood of Kabul, that afterwards gave name to the province, anciently known as Arachosia, when distinguished from Aria, or Khorasan. In the history of the Afghans it is said to extend in length from Bajour as far as the districts of Bahkar, and, in breadth, to run from Hassan Abdal to Kabul. Kho Suliman, and Ashnaghar were the places first inhabited after the emigration of the Ghaurians in the time of Mohammed Ghauri.

Ibn Haukal tells us that in the districts of Rohaj, including Tell and Darghes, on the banks of the river Hirmand, with Toghahi, Kabul, and Ghur of the colder climate, the people applied themselves to farming and husbandry. The Khiljians were in his time a Turkish, or Tartar race, who, in ancient times, had settled in the country between Hindustan and Sijistan. " They resemble, says he, " the Turks or Tartars in personal appearance, and retain the dress and customs of that nation and all speak the Turkish language." The subsequent emigration of the Aimaks and Hezarahs from Moghalistan has been already noticed in the remarks on their language ; and the Emperor Baber tells us in his memoirs, that in his time the Hezarah and Nukdere tribes spoke the Moghal language ; besides which he enumerates the Arabic, Persian, Turkey, Hindi, Afghani, Pashai, Parachi, Geberi, Berreki, and Lamghani languages, which were spoken by so many distinct races.

We are much obliged to Lieutenant Leech for affording us the means of judging from whence came this interesting people, regarding whose origin I offer with the greatest diffidence the above remarks, particularly as this subject has engaged so competent and able a commentator as Mr Elphinstone.

## No. 1.

List of words in the Bariki language, cognate with Persian, Sanscrit, and Hindi.

No.	Word.	Derivation.	No.	Word.	Derivation.
1	رز	Pers :	22	سینه	Pers :
2	خواهر	Pers :	23	لب	Pers :
3	धरुण	Sans :	24	چشم	Pers :
4	ग्राम	Sans :	25	سر	Pers :
5	درخت	Pers :	26	ترش	Pers :
6	भुता	Hind :	27	शोर	Pers :
7	اسپ	Pers :	28	نرم	Pers :
8	اسپ	Pers :	29	تاریکی	Pers :
9	آهو	Pers :	30	انگور	Pers :
10	خمر	Pers :	31	پکا	Hind :
11	खजर	Hind :	32	نا پا	Hind :
12	कفتार	Pers :	33	شاخ	Pers :
13	خرس	Pers :	34	سم	Pers :
14	آهن	Pers :	35	کور	Pers :
15	قاعی	Pers :	36	گفت	Pers :
16	سرب	Pers :	37	کو	Pers :
17	مس	Pers :	38	راست	Pers :
18	برنج	Pers :	39	کچ	Pers :
19	طلا	Pers :	40	کاغذ	Pers :
20	نقوه	Pers :	41	قام	Arab :
21	یشت	Pers :	42	راه	Pers :

No. I — *Continued.*

No.	Word.	Derivation.	No.	Word.	Derivation.
43	نام	Pers :	66	میرچی	Sans :
44	زین	Pers :	67	مسک	Pers :
45	میر:	Sans :	68	قیمت	Arab :
46	خشت	Pers :	69	ارزان	Pers :
47	نواسہ	Pers :	70	پنہ	Pers :
48	بکری	Mar :	71	بروت	Pers :
49	نرگاو	Pers :	72	دارو	Pers :
50	گندم	Pers :	73	ہاس	Sans :
51	رز	Arab :	74	نیل	Pers :
52	پیاز	Pers :	75	زرد	Pers :
53	تنباکو	Pers :	76	ماہی	Pers :
54	شلغم	Pers :	77	ستارہ	Pers :
55	کرم	Pers :	78	مشرق	Arab :
56	ترب	Pers :	79	مغرب	Arab :
57	گاجر	Sans :	80	شمال	Arab :
58	انار	Pers :	81	جنوب	Arab :
59	کلاب	Pers :	82	باد	Pers :
60	نمک	Pers :	83	سبک	Pers :
61	تیل	Sans :	84	وزنی	Arab :
62	شکر	Pers :	85	خراب	Arab :
63	قند	Arab :	86	ذره	Arab :
64	گڑ	Sans :	87	بس	Pers :
65	نما	Pers :	88	نہ	Pers :

## No. I. — Continued.

## ORDINALS.

No.	Word.	Derivation.	No.	Word.	Derivation.
1			6	چهار	Pers : S.
2	دو	* Pers : S.	7	سات	Pers : S.
3	تین	Pers : S.	8	آٹھ	Pers : S.
4	چار	Pers : S.	9	نو	Pers : S.
5	پنج	Pers : S.	10	دہ	Pers : S.

## No. 2.

List of words in the Pashai language, cognate with Persian and Sanscrit.

No.	Word.	Derivation.	No.	Word.	Derivation.
1	दिवस	Sans :	14	माकड	Mar :
2	हमन	Sans :	15	یا	Pers :
3	भाई	Mar :	16	جہاگ	Hind :
4	खसा	Sans :	17	नवनीत	Sans :
5	अंगार	Sans :	18	آرد	Pers :
6	खांदी	Mar :	19	سونہرا	Hind :
7	घोड़ी	Mar :	20	नासिका	Sans :
8	دد تر	Pers :	21	जिह्वा	Sans :
9	दारु	Sans :	22	بروت	Pers :
10	دارو	Pers :	23	سینہ	Pers :
11	ضعفہ	Arab :	24	لاغر	Pers :
12	चार	Sans :	25	پیراھن	Pers :
13	मान	Mar :	26	मच्छ	Sans :

No. 2—*Continued.*

No.	Words.	Derivation.	No.	Words.	Derivation.
27	خر	Pers :	46	दादी	Mar :
28	چپ	Pers :	47	चुचुक	Sans :
29	نرگچ	Turk :	48	कक्ष	Sans :
30	ماء	Pers :	49	इयाम	Sans :
31	हिम	Sans :	50	पीत	Sans :
32	گرم	Pers :	51	جهوتا	Hind :
33	शुंग	Sans :	52	चिल	Sans :
34	پی	Hind :	53	غنیم	Arab :
35	گوشه	Pers :	54	خر	Pers :
36	घोडा	Mar :	55	दक्षिण	
37	بيہزا	Sans :	56	सूयौदय	Sans :
38	गालि	Sans :	57	तारा	Sans :
39	می	Pers :	58	راست	Pers :
40	गोधुम	Sans :	59	ابر	Pers :
41	लवन	Sans :	60	अंध	Sans :
42	گاؤ	Pers :	61	بہی	Pers :
43	घास	Sans :	62	انار	Pers :
44	भक्षि	Sans :	63	خام	Pers :
45	दंत	Sans :			

List of words in the Lughmāni dialect, cognate with Persian, Sanscrit, and Hindi.

No.	Word.	Derivation.	No.	Word.	Derivation.
1	हस्त	Sans :	23	दादी	Mar :
2	आइ	• Mar :	24	پیاز	• Pers :
3	स्वसा	Sans :	25	گرم	Pers :
4	भंगार	Sans :	26	خرگوش	Pers :
5	खादी	Mar :	27	یار	Pers :
6	घांस	Sans :	28	کمان	Pers :
7	أدم	Arab :	29	خام	Pers :
8	स्वर्ण	Sans :	30	جانور	Pers :
9	गोष्ठ	Sans :	31	ماه	Pers :
10	जिह्वा	Sans :	32	वार	Sans :
11	بروت	Pers :	33	ابر	Pers :
12	دور	Pers :	34	سم	Pers :
13	इयात	Sans :	35	شیروین	Pers :
14	زرد	Pers :	36		
15	निल	Pers :	37	बोडा	Mar :
16	بیراهن	Pers :	38	ناکاره	Pers :
17	سر	Pers :	39	गालि	Sans :
18	नख	Sans :	40	वायगण	Mar :
19	चप	Pers :	41	گولہ	Pers :
20	دروغ	Pers :	42	गोधूम	Sans :
21	بغل	Pers :	43	نقره	Pers :
22	दंत	Sans :	44	नासिक	Sans :

## No. 3.—Continued.

No.	Word.	Derivation.	No.	Word.	Derivation.
45	پای	Pers :	57	زلزلہ	Arab :
46	کالا	Pers :	58	غلاف	Arab :
47			59	پشم	Pers :
48			60	कुल	Sans :
49	मच्छ	Sans :	61	تیر	Pers :
50	کار	Pers :	62	پیچیدہ	Pers :
51	راست	Pers :	63	پرنده	Pers :
52	راست	Pers :	64	شاخ	Pers :
53	बहु		65	قول	Arab :
54	شانہ	Pers :	66	बध	Sans :
55	زان	Pers :	67	گنگ	Pers :
56	धूम	Sans :	68	چاہ	Pers :

## No. 4.

List of words in the Kashkari language, cognate with Persian, Sans-  
crit, and Hindi.

No.	Word.	Derivation.	No.	Word.	Derivation.
1	मनुष्य	Sans :	12	ریش	Pers :
2	उष्ट	Sans :	13	دندان	Pers :
3	नासिक	Sans :	14	جی	Arab :
4	غریب	Arab :	15	مشروب	Arab :
5	अंगार	Sans :	16	کرزج	Pers :
6	پیراهن	Pers :	17	پاون	Hind :
7	हस्त	Sans :	18	गल	Sans :
8	بوم	Pers :	19	ستاره	Pers :
9	कदहा	Hind :	20	مہتر	Pers :
10	پشم	Pers :	21	जन्म	Sans :
11	سہ	Pers :			





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.PROCEEDINGS  
• OF THE •  
BOMBAY GEOGRAPHICAL SOCIETY.

AUGUST 1838.

PAPERS, ETC.

**I.—*Report of a Voyage down the Gahra and Indus, from Hareke Puttun to the Sea.* By Doctor Gordon.**

[Dr. Gordon's Report was forwarded to the Society with the subjoined letter from the Secretary to Government.]

TO THE SECRETARY TO THE GEOGRAPHICAL SOCIETY.

Bombay Castle, 11th May, 1838.

SIR—I am directed by the Right Hon'ble the Governor in Council to request that you will be pleased to present to the Geographical Society of Bombay, in the name of this Government, in order that the same may be diffused as widely as possible, the accompanying interesting and valuable report upon the River Indus, dated the 20th ultimo, drawn up by Assistant Surgeon Gordon, of the Bengal Establishment.

I have the honor to be,

Sir,

Your most obedient servant,

(Signed) J. P. WILLOUGHBY,

Secretary to Government

*Report.*

To J. P. WILLOUGHBY, Esquire, Secretary to Government,  
Bombay, 20th April, 1838.

SIR—I have the honor to report to you, for the information of the Right Hon'ble the Governor in Council, that I was appointed on the 18th of December last, to take charge of the investment of goods, which Maharaja Runjeet Sing was preparing to send from the



Punjab to Bombay, by the Indus and its tributaries. I proceeded immediately to Loodiana distant seventy miles from Ambala, to the Political Agency of which I had been two years attached as Assistant Surgeon. I left Loodiana on the evening of the 26th by dawk, and arrived on the following morning at Hareke Puttan, situated three miles below the confluence of the Sutledge and Beas, and about forty-five miles distant from Loodiana.

I found here five boats, varying in burden from four hundred to seven hundred maunds. They were flat bottomed, strongly built vessels. The largest was nearly eighty feet long and eighteen broad, with a high, broad stern of square form. The bow was raised about three feet above the water, and was nearly square. Both it and the stern were planked over for several feet. The helm was very broad below, narrowing nearly to a point at the top, and was worked by two poles between which the steersman sat on an elevated platform. It seemed exceedingly clumsy, but was worked with apparent ease. The other boats were built on a similar plan, and their draught of water varied from three feet two inches, to three feet six. The crews consisted of eight men for the smaller boats, and ten or twelve for the larger. Each boat was furnished with one mast, a large square sail, and two very heavy oars at the bow. In the downward voyage, the masts are struck and the vessels propelled by the oars, each of which is manned by three or five persons who work in the erect posture, moving a step or two forwards and backwards at each stroke. These boats belonged to Bahawulpore, from which place Capt. Wade, Political Agent of Loodiana, had sent for them, the rivers Sutledge and Gahra above Bahawulpore, not furnishing vessels of sufficient burden to cover the expenses of the duties as now levied.

Three of the boats contained merchandize belonging to Maharaja Runjeet Sing, intended for the Bombay market, the other two were filled with soft sugar (the property of some merchants of Umritseer) for disposal at Bahawulpore, Shikarpore, and other towns on the Gahra and Indus. The cargoes of his Highness' boats being incomplete, I was detained for several days waiting for additional goods, which having all arrived on the 3d of January, I commenced my voyage on the following morning. I reached Ferozpore, a distance of twenty miles, on the 6th about noon. Between Hareke and Ferozpore, I met with the only serious detention from the shallowness of the river, which occurred throughout the whole voyage. At Hareke the river has a breadth of nearly four hundred yards, and a depth of nine and a half feet, the current running at the rate of two and a half

miles an hour. About eight miles further down, near the Puttun, or ferry of Hamud Re, the river separated into two channels during last rains, the deep channel having crossed over from the right to the left bank. A large sand bank, two miles long, intervenes between the two sides of the river; there are likewise numerous small sand banks and shoals, and a distance of at least a mile separates the sides of the river. The deep channel after following the left bank for a mile crossed over towards the large sand bank in the middle of the river. At this place there is a great expanse of water, and the true channel being ill-defined, all the boats grounded. Two of them were got off in two hours, but the others being found immovable, were left aground all night: early next morning two of them were got off, and the third was set afloat after disembarking one third of its cargo. I made a minute examination of the bed of the river, and found a channel having four feet of water, within one hundred yards of the place where the boats grounded, and, as none of the boats drew so much, previous examination would have prevented the detention that occurred. Afterwards wherever the river became greatly expanded, the boatmen brought the boats to in the middle of the stream, by driving in its bed a stake attached to the bow by a strong rope. Two or three men were then sent to search for the deep channel, which in every case was found without difficulty. By adopting this precaution, accidents similar to the above were effectually obviated, and during the navigation of the Gahra, it was not necessary to have recourse to it on an average above once or twice a day; some days passing without a single stoppage occurring.

From Hamud Re to Taleewala and Nuggur, a distance of six or seven miles, the course of the river was exceedingly winding. About two miles below Taleewala its bed became suddenly greatly widened with many sand banks, and shoals intervening between the banks, the deep channel crossing from right to left, and from left to right, in a very remarkable manner for a mile to Nuggur, where the river again contracted to about two hundred and fifty yards, with a deep channel of from fourteen to twenty feet. This state continued only for quarter of a mile, when a great expansion presented itself, the banks of the river being separated by a distance of more than two miles, with large and small sand banks and shoals intervening. The true channel, which followed the right bank, was very narrow and had only four feet. The current was running at scarcely two miles an hour. The boats grounded several times, but were easily got off in a few minutes. The helm'smen displayed great skill in guiding the boats through this intricate navigation, tracing by the eye the signs

that characterize the deep water, with a precision quite inexplicable to an inexperienced person. The oars were used merely to keep the bow of the boat with the stream. During last rains, the river in changing its bed about four miles above Ferozpore, tore off a large portion of the right bank; the separated part now forming an island three miles long by one thousand one hundred yards broad. The deep channel formerly passed along the left bank; it now follows the right, and the width of the stream is between two thousand and three hundred yards, the navigation being uninterrupted by shoals or sand banks. I was detained at Ferozpore from the 6th till the 9th, in consequence of a new arrangement having been adopted with regard to the soft sugar. This article not being intended for Bombay, Maharaja Runjeet Sing had issued orders for its disembarkation, its place to be supplied by merchandize fitted for that market. The new cargoes not having arrived on the 9th, and the season being far advanced, I was apprehensive that, if I waited longer, I might endanger the success of the expedition. I accordingly started on the morning of that day, having been informed by Captain Wade that he would despatch the two remaining boats with the utmost expedition. I arrived on the evening of the 9th at Mundote on the left bank, the seat of a small Patan principality, feudatory to Runjeet Sing. The distance is twenty-two miles. On the 10th I reached Rhyberee on the right bank, a distance of twenty miles. Both yesterday and to-day high winds prevailed from the south west and west, varying in the evening round to the north. These were a source of considerable retardation, sometimes driving the boats on shoals and sand banks. The boats were, however, easily got off by the unaided efforts of their respective crews, a delay of only a few minutes occurring at each stoppage. The course of the river was comparatively straight, and though shoals and sand banks presented themselves, these were of much rarer occurrence than higher up the river. In three places the stream divided into two channels which united after a few miles separation. The current was generally two and a half miles an hour, and the soundings varied from six to twenty feet. The banks which were higher than between Hareke and Ferozpore, were thickly covered with Tamarisk shrubs and long grass, called *kabec* by the natives. I observed for the first time Persian wheels employed to draw water from the river for the purpose of irrigation. 11th. I arrived in the forenoon at Jode Re Puttun, on the right bank, a distance of ten or twelve miles. I brought to at this place to wait for the arrival of Dewan Devec Sehah, the person who had been deputed by Runjeet Sing to accompany the

fleet to Bombay. He was encamped at Attaree, six miles from the bank of the river; his arrangements having been completed, he embarked on the evening of the 12th, and the voyage was resumed on the following morning. Reached Salim Re Puttur at sunset of the 13th, a distance of at least forty miles. This day there was no wind, and the men worked at their oars almost uninterruptedly till we halted. None of the boats grounded; a few sand banks and shoals were met with, but the navigation was little impeded thereby, a very slight degree of caution being requisite to avoid them. For many miles together the channel of the river was confined within its natural limits, presenting a fine body of water from four hundred to six hundred yards in width, a gentle current, and a depth which often reached 25 and 30 feet. The river did not wind much, though there was considerable tortuosity in the course of the deep channel which frequently crossed from bank to bank, even where the river itself was tolerably straight. I have, on several occasions, counted seven or eight crossings of the true channel in as many miles. It was easy, however, to trace it, and no inconvenience was experienced from its deviations, except the delay occasioned by the additional distance passed over. I had hitherto commenced each day's voyage in the mornings at dawn; but I found that my progress was not accelerated by starting at so early an hour, the cold being so great, that the men worked unwillingly and without spirit. They consented to start at sunrise, which they afterwards did throughout the voyage, coming to at the first convenient spot after sunset. At dawn the thermometer frequently stood at 38° or 39°. At sunrise it was generally from 40° to 42° while at 2 P. M. it rose to 76° during calm weather, or to 67° and 69° when high winds prevailed.

On the 15th arrived at Behadur Re after two days sail, during which the weather being calm, the distance made was upwards of sixty miles. The banks of the river still presented dense jungles of tamarisk and kabee grass, interspersed with patches of cultivation from the river by Persian wheels, called here *Jhalers*. The bed of the river contained sand banks and shoals, but not so numerous as to retard the navigation. The current and the depth varied little from what occurred on the two previous days. The distance between the banks was occasionally very great, but on no occasion did the soundings give less than six feet. The boats sometimes missed the true channel and grounded. They were however, easily set afloat.

Arrived at Soormadance on the left bank on the 18th, distance

nearly seventy miles. During the first two days the winds were light, and none of the boats grounded. On the 3d day, our progress was impeded by strong winds from the west and north-west, and the boats were occasionally driven on shoals, requiring in one instance half an hour's labor to get them off. Towards 3 o'clock P. M. the wind lulled and no stoppage occurred afterwards. The strength of the current began sensibly to diminish. The greatest depth which I found was eighteen feet, and the least four and a half in the true channel. The course of the river was much more winding, but there were fewer shoals and sand banks. The breadth of the river, and the appearance of its banks, had undergone little alteration.

19th. Arrived at Poonca on the right bank, twenty-five miles. The river was remarkably winding, and the banks a good deal lower, but in other respects they presented little change. The current was sluggish and only one stoppage was occasioned by shoals or sand banks which occurred at long intervals. The lowest sounding was rather less than seven feet, and the navigation was remarkably favorable. About noon there was a strong breeze for an hour, but it afterwards became completely calm. I reached Bahawalpore on the 21st, distant from Poonca fifty-five miles. During these two days, the current proceeded at a very slow rate, sometimes scarcely a mile in an hour, and the breadth of the river became still farther diminished. The banks were in general low, and the scene was agreeably diversified by the frequent occurrence of villages. The Tamarisk did not now form the chief feature of the landscape; numerous large trees and extensive tracts of cultivation, being visible.

The season at which I passed down the river Gahra, is that during which it has the least body of water, and it was unusually low in consequence of the small quantity of rain which fell last year in the Himalayas, and the countries which border on them. The navigation is free from impediments of consequence, and I am convinced that the whole course of the river, a distance of more than four hundred miles, might, with proper precautions, be regularly traversed in twelve or fifteen days by laden boats, drawing four feet. Shoals and sand banks do not present, on actual experience, serious obstructions. They are easily avoided; and do not excite attention except when the river has a great expanse of water, or divides into two or more channels. It is then merely necessary to bring the boats to for a few minutes, to give the men an opportunity of discovering the true channel by personal inspection. The necessity for this does not occur often even at present; and I have no doubt that it would

be still further reduced if intercourse by the river were established on an extensive footing. Frequent voyages would enable the boatmen to distinguish the signs that characterize the deep water, in circumstances where they now experience difficulty. The boats with me sometimes grounded in consequence of my urging the crews to use their oars in opposition to their own opinion. The season was so far advanced that I anxiously avoided delay, and in some places, I prevented the previous examination of the channel recommended by the boatmen. It was only in a few instances, however, that the boats grounded.

This river is admirably adapted for steam navigation. The current has so little force, scarcely ever amounting to three miles an hour, that steam vessels might be used with great advantage to tug laden boats against the stream. With their aid the passage from Bahawulpore to Hareke, would probably occupy only eight or ten days, while at present it can be effected with difficulty in a month and a half. Firewood is found in immense quantities throughout the whole course of the river, afforded by the dense jungles of tamarisk, which is used universally by the inhabitants as fuel, for which purpose it is well adapted. Depôts, similar to those on the Mississippi, and other great rivers of America, where wood is used to supply the Steamers, might easily be stationed at proper intervals on the banks of the Gahra, which possess in their superior salubrity a most important advantage, over those of the Mississippi. Other supplies besides fuel, are cheap and abundant, and the people are civil and communicative.

I regret that my intercourse with the inhabitants was very limited; the necessity for expedition, giving me imperfect opportunities of enquiring into their habits or condition, or into the state of their country. I made only one halt between Ferozpore and Bahawulpore, and the boats sailed all day, coming to at the first convenient spot which presented itself after sunset, sometimes at a distance from any inhabited place.

I ascertained, however, one great change in the habits of the people, which I will mention, as it has an important relation to the safe navigation of the river. A few years ago, even as late as 1833, the inhabitants on the both sides of the river, in the countries lying below the Bahawulpore frontier, were much addicted to predatory habits, leading a roving life among the thick jungles which characterize the banks. They lived in huts formed of reeds—mere temporary dwellings, which they often changed for purposes of plunder, or to avoid attack or pursuit. Their property consisted chiefly of

large herds of very fine buffaloes; and agriculture was almost totally neglected. Excursions for the purpose of cattle stealing, were frequent on a large scale. The inhabitants of a village often placed themselves under a leader, and crossing the river, suddenly attacked some place previously agreed on. If successful, they carried off all the cattle, the river affording great facility for rapidly conveying the booty beyond immediate pursuit, and the jungles forming a good retreat. The injured party did not submit quietly to the loss of property. They generally collected a considerable force from the neighbouring villages, and in their turn crossed to the opposite bank of the river. They made little discrimination between the property of those who had made the attack on them, and that of other villages—seizing all the cattle of which they could obtain possession, without enquiring to whom they belonged. This of course led to reprisals and long continued feuds often attended by blood-shed; and the country was kept in a constant state of anarchy and confusion, the men tending their cattle or following their limited agricultural pursuits, *were* armed and in constant dread of attack.

Previous to 1833, Nawab Bahawal Khan had never visited his territories situated above Bahawalpore. Since that period he has several times personally examined into their state, and has adopted vigorous measures for the suppression of the system of plunder and retaliation (called *Sdihung*) which exercised so baneful an influence over an extensive portion of his country. He has been ably seconded by Dewan Sawun Mull, the Governor of Multan, whose jurisdiction extends over the territories on the right bank, opposite to those of Bahawalpore. Their joint efforts have effected a most beneficial change in the character and manners of the people, predatory excursions being now rare, and the instances of cattle stealing which occur, are rather petty thefts, being principally confined to the carrying off of stray buffaloes by individuals or small parties. The comparative security to persons and property which has resulted, has given a considerable stimulus to agriculture; and the inhabitants of some of the villages, formerly notorious for their wild and unsettled habits, now follow the peaceful occupation of husbandmen. The number of Persian wheels, especially on the left bank of the river is gradually increasing, and I observed numerous herds of buffaloes, grazing in the jungles tended by one or two persons without weapons of any kind. Previous to 1833, the Officers of Bahawal Khan collected with great difficulty a most insignificant revenue from the large and fertile tract, lying between Mobarukpore and Rama Wuttoo, his northern frontier, the greatest sum realized

being under 3,000 Rupees. Last year the revenue for the same district exceeded 9,000 Rupees; and little opposition was made to its collection.

On the morning after my arrival at Bahawalpore, (22 January), I sent for the principal merchants who had received orders from the Nawab, to load two boats with goods for Bombay. They had made no preparations for doing so, and I found them exceedingly unwilling to enter into any speculation by the river route. They stated numerous objections, the principal of which was their ignorance of what was saleable at Bombay, and of the present price current of that place. I could afford them little information, as I had with me only two prices-current of Bombay, both of which were of 1836; and the short time that elapsed between my being appointed to the charge of the expedition and my setting out, rendered personal enquiry impossible. They took a copy of the prices of such articles as seemed to promise a remunerating profit. I explained to them the nature of the treaty, and endeavoured to impress on their minds the advantages which would certainly accrue to them, if the river were to become a channel of commercial intercourse. They seemed under great apprehension of dangers in the river, which made me more particularly anxious for some of them to accompany me, that their fears might be dissipated by experience. After a conversation of between three and four hours they left me, promising to return next day, when, after a consultation among their friends they would inform me of their final determination. They returned next day (23d), and after a good deal of explanation, they said they would embark cargoes on two boats which would be ready to sail in a few days. They requested me to remain for three or four days in order that their investments might either be sent along with me, or at least overtake me, should I be detained at other places on the route.

During my stay I met with some Loharee merchants who had lately arrived with goods, from Afghanistan and Bokhara, consisting of assafetida, munjeet, raw silk, and dried fruits. I had several conversations with them and the merchants of Bahawalpore, with regard to the best place for establishing a general depôt for goods on the Indus, or on one of its tributaries. Mittunkote, Mooltan, Dera Ghazee Khan, Dera Ismail Khan and Bahawalpore, were all mentioned as eligible situations. They, however, appeared to give a decided preference to Mittunkote, on condition that permission were granted to land merchandize there, and carry whatever was found unsaleable, to Mooltan, Bahawalpore, or other cities on the



payment of such duties only as would have been levied, had they been conveyed originally to these markets.

The Geographical position of Mittunkole, situated at the confluence of the waters of the Punjab and the Indus, presents great advantages for a commercial depôt. It is only two miles from the right bank of the river, and during eight months of the year is of easy approach. During the rainy season, however, it is nearly surrounded by water rendering it difficult of access, and it is a place of no importance either with regard to population, or the means of warehousing goods. Were it fixed on as a depôt, the latter of these disadvantages, would soon be remedied ; people would flock to a spot where regular and profitable employment was procurable, and experience would probably suggest means for facilitating access to it. Dera Ghazee Khan and Mooltan, are at all times easily approached, and as they are cities of considerable extent and commercial importance, either of them might at first be an eligible site. On the other hand considerable inconvenience would be experienced by the merchants conveying goods for consumption to markets on the rivers, distant from these cities, were they obliged in the first instance to repair to either of them and afterwards send their merchandize to places in which it was in demand. Were a commercial intercourse, however, once established on an extensive scale by the river route, the interests of the different parties engaged in the traffic would lead to such full enquiries that the most eligible situation for a depot would soon be discovered and speedily followed by its establishment. Of the advantages of such a measure, all the merchants with whom I conversed, seemed fully aware.

While at Bahawulpore, I likewise met with a native of Shiraz, called Meerza Mohummud Tahir, who had been two years resident in Hyderabad, having been sent there with an investment of goods for disposal in Sinde, by Hajee Mohummud Raheem Khan, a Persian merchant of Bombay. He stated that the whole amount of goods which he had sold during his residence in Sinde, did not exceed one lac of Rupees. He gave the following account of the different articles: 6000 Rupees worth of sugar ; Pearls, 12,000 Rupees ; 70,000 Rupees worth of different kinds of cotton cloth. That most in demand he called unwashed Satin or Long Cloth, in Persian, Chulwaree, and known at Hyderabad by the name of Kora basta. The remainder of the goods disposed of consisted of a few English and French chintzes, and some silk goods, but these according to his account have a very limited sale. He had left Hyderabad between two and three months previously, the speculation not having answered the expectations

entertained by his employer. He came to Bahawalpore in a boat containing the goods for which he could not find a market in Sind, and which it was his intention to convey by the river to Loodiana. Having some business to transact at Bahawalpore, he had sent the boat on under charge of another Persian named Aga Janee. I met him at Sooringanee, and took measurements of the boat. It was built at the Government Dock yard of Bombay by Cuffetjee Rustomjee, to the order of Mohummud Raheem and was expressly intended for the navigation of the Indus. Its build is quite different from that of any of the boats which I met with on these rivers. Its bow is sharp and low; its stern is round, and only three feet above the water. It is flat bottomed and drew two and a half feet of water; when empty it has only a draught of one foot. It is sixty-two and a half feet long, and eleven broad between its outer edges. It is calculated to carry seven hundred maunds, but had only between three hundred and four hundred on board. It carries two masts, and was said by the person in charge, to sail in a superior manner to any boats he had met with. It occasionally grounded in shoal water but was easily set afloat. The progress of the boat had been very slow, seldom exceeding eight miles a day, except when high winds prevailed, when twelve or fifteen miles had been made. Recourse was had chiefly to tracking or pushing the boat against the stream with long bamboos. No accident had occurred either from the falling of the banks of the river or from any other cause, and both Mohummud Tahir and Aga Janee concurred in stating that they had completed so much of their voyage without experiencing in a single instance the slightest molestation from the inhabitants, of whom, on the contrary, they spoke in very favorable terms. They readily procured supplies on paying the bazar prices for what they required. An account of the vessel above alluded to, appeared in the Agra Akhbar of the 15th ult. in an extract of a letter from Loodiana. This has since been quoted by the Bombay and Calcutta papers. It is stated by the writer from Loodiana, that the boat drew ten feet, and that no scarcity of water was found throughout the whole voyage. I made enquiries at the Dockyard with regard to her, and was informed by Capt. Wilson, that her depth from the floor to the gunwale was four feet, and that she drew two and a half feet of water, but that if fully laden, she might draw a few inches more. I left Bahawalpore on the morning of the 26th and arrived at Chacher, on the left bank of the Indus, opposite Mittunkote, early on the 28th, a distance of about ninety miles. The banks of the river were low, well wooded, and cul-

tivation extensive. Till the junction of the Gahra and Chenab, the current was very moderate, and the navigation quite unimpeded. At the confluence there were numerous sand banks which were easily avoided, only one of the boats having grounded. On entering the Punjund a noble stream of water presented itself, at least six hundred yards wide, with a depth seldom less than eight feet, and often reaching twenty. It was comparatively straight, and the boats passed along its whole course without a single obstruction. The current was nearly two and a half miles an hour. For several miles there was a marked difference in the colour of the water of the two rivers, that of the Chenab which followed the right bank being of a reddish colour.

At Mittunkote, I found twelve boats containing merchandize, the property of Maharaja Runjeet Sing, which had been sent by the Jhelum and Chenab. The construction of these boats differed in some respects from that of the Bahawulpore ones. Their length was proportionally greater than their breadth, and the stern which was a good deal higher, had a platform much elevated thrown across it, on which two men worked a very long and heavy oar used as a rudder. The largest boat was nearly one hundred feet long, and was propelled by two oars at the bow, and two in the centre. Another was placed on one side near the stern, and was employed to assist the two men at the helm in turning the boat when expedition was requisite. Its draught was three feet nine inches; its burden eight hundred maunds; and its crew consisted of fifteen persons. The other boats were of similar build; but the smaller ones had only one oar at the stern, and two at the bow; one of them carried only two hundred maunds, and had a draught of two feet eight inches.

The merchandize consisted of Rock Salt, Indigo, Cotton, Dyes, and Drugs. The boats being much underladen, I emptied six of them and transferred their cargoes to the remaining six. Their crews were very deficient, most of the men having returned to their homes in consequence of their arrears of pay not having been made up, and I was under the necessity of hiring forty-five additional boatmen.

Wheat was remarkably cheap at Mittunkote, selling at one rupee for one hundred and twelve pounds; understanding that it was likely to fetch a good profit in Bombay, I advised some merchants of Bahawulpore to send an experimental cargo, which they did in two boats. The fleet now consisted of thirteen laden boats, and four for the accommodation of Dewan Deves Sabae and myself. At a short distance from Mittunkote, the Indus divides into two channels, the one on the left bank being about six hundred yards wide, and

that on the right about four hundred. In the former there is a depth of twenty-five feet, and in the latter seventeen. They are separated by a sand bank two miles broad, and about four or five miles in length. At their junction there are numerous shoals, on which two of the boats grounded; I reached Mian Mudhar without further obstruction at 4 P. M. on the 9th of February; the river had a deep channel of never less than nine feet, which was followed with the greatest ease, though there was a good deal of wind. Mian Mudhar is a small town having between two hundred and three hundred houses, and is situated on the frontier of Bahawal Khan's territories.

I started from Mian Mudhar early on the morning of the 11th. There was a strong wind from the south-west, and every thing was obscured by clouds of dust. I was obliged to bring the boats to between 3 and 4 P. M. on account of the violence of the wind; and it was with the greatest difficulty, that I could make the right bank, which the vicinity of the Ghazees made me anxious to do. A party on horseback and on foot appeared on the left bank in the evening, but the state of the weather prevented communication with them. At the halting place the river divided into two branches. I sent the boats off on the morning of the 12th by the one following the right bank, and went myself in a small boat by the left branch.

I joined the fleet half an hour after sunset near Ken, five miles below the point where the two branches of the river re-unite, and twenty miles distant from our starting place. The channel on which I sailed was the smaller of the two, being not more than forty yards wide. The depth was from four and a half feet to twelve and fifteen; the current was under two miles, and the course was exceedingly winding. The banks were covered with thick tamarisk jungle, interspersed with the Sahan, the branches of which the Hindoos cut up and use instead of tooth brushes. At a village five or six miles above the junction, there were thirty-five boats, varying in burden from one hundred and fifty to four hundred and fifty maunds, which were laying in cargoes of grain, chiefly Jooar, for the market of Hyderabad. The island formed by the separation of the river, is about fifteen miles long and half as broad. A few villages, or rather collections of four or five huts, were to be seen on its banks.

This day I made only about eighteen miles, coming to three miles below the village of Churk. There was no inhabited place where we halted, in a very narrow bed of the river. About a mile higher up, the river divided into three branches, the deep channel following that one which I entered. The left bank was to-day low and sandy; the

right, eight feet high and covered with tamarisk shrubs. Our progress was impeded by strong winds from the west and south, obliging me to bring the boats to for three hours, between noon and 3 P. M. ; one of the boats grounded having been driven on a shoal by the violence of the wind. It was, however, soon got off by the unaided efforts of its own crew. The bed of the river was in general about six hundred yards wide, and the deep channel well defined. The current was running at the rate of three miles an hour. There was frequently a depth of thirty-six feet; it was however, much less at the few places where a great expanse of water existed, being there from six to eight feet. Sand banks or shoals were not numerous. The channel was very winding often crossing from one side of the river to the other ; thereby adding very much to the actual distance passed over. On the 13th, 14th, and 15th, the weather was perfectly calm, and I made from forty-five to fifty-five miles a day; during these three days none of the boats grounded, and the navigation was perfectly unobstructed. The course of the river was very winding, and in some places there were two channels divided by large sand banks several miles in length. In these situations there was always of course less water, and though there were many shoals, none of the boats struck against them, the deep channel being broad, and having in general from ten to fourteen feet of water. Near Roree, where I arrived on the 15th, the river divided into three channels, the deepest of which had only five and a half feet of water.

From Mittunkote to Roree, the banks of the river present little to interest, the edge being mostly covered with tamarisk shrubs, and jungle of gigantic grass. The country seemed to be very scantily inhabited, and the Persian wheels, of which I had remarked so many on the Gabra, were few in number. I found the inhabitants quietly disposed and civil. I was detained at Roree from the 15th till the afternoon of the 19th. During my stay I visited the Meers of Khyrpoor, who were then residing at the town, whence they derive their title, a distance of sixteen miles from Roree.

At Roree the river is divided into two channels by the small island on which the Fort of Bukkur is situated. There are numerous rocks in its bed, but, as there was a broad channel with abundance of water, there was no difficulty in the navigation. Between the island and the left bank, the river had a width of three hundred yards. The current was by no means rapid, though in the rainy season it is said to run with great violence. The rocks were soon cleared, and we arrived in the evening at the ferry of Shirkarpoore, a distance of nine

miles. I here unloaded one of the boats which contained drugs and dyes, having been informed that many of the articles on board the fleet were found in the market of Bombay, which was supplied from the hills in the Deccan and from the Persian Gulph. I again started on the 20th, and arrived without interruption at Sehwan in the afternoon of the 23d. The channel was deep and well defined, there appeared to be few shoals or sand banks, and the current was much slower than higher up the river, being during the last two days, never more than two miles an hour, and often less. The banks of the river presented the same dull uniformity of jungle, occasionally enlivened by villages of reed huts surrounded by partial cultivation. I brought to here, to enable the boatmen to visit the shrine of Shah Lal Baz, two miles from the Indus on the banks of the Arul, which under the name of Nard, leaves the main stream above Larkhana and rejoins it at this place. I left Sehwan on the morning of the 24th, and arrived at Noorwalla on the right bank, eleven or twelve miles above Hyderabad, at 10 o'clock A. M. on the 26th. To this place, a distance of about ninety miles, the navigation was quite unimpeded, not a single boat having grounded. I came to here, in consequence of having received information, that the river a mile or two further down was very shallow. Forty-seven boats laden with grain for Hyderabad, and other markets on the Indus, were detained here. Most of these boats were much deeper in the water than those with me; two of them having a draught of upwards of five feet. They were laden almost to the waters edge, and must have been very unmanageable in shoals. Their crews assured me that the shallowness of the water had been caused last October by a holy Syud, resident on the opposite bank, in consequence of some supposed insult he had received from the rulers of the country; and they seemed firmly to believe that till the offence were expiated, the river would not resume its wonted depth. None of them presumed to attempt the passage without conciliating this person, and when they saw that I was determined to go on without paying him this compliment, they confidently predicted a complete failure. Besides propitiating the saint, however, they found it necessary to disembark a large portion of their cargo, and to convey it in small boats beyond the shoal.

I hired a pilot with whom I sent a man from each of the laden boats, to ascertain the depth on the shoal, and I carefully examined it myself. At Noorwalla, the deep channel makes a sudden bend towards the left bank, the current running in a narrow bed with more than usual velocity. At first it passes at a distance of two hundred

yards from the left bank, which it rapidly approaches, till it runs close along it with considerable force. The bank is here composed of very yielding sand, stretching for nearly a mile to the limits of the inundation. This sand seems to have been extensively undermined, and tumbling into the bed of the river, a great expanse of water, giving rise to the present shallowness, has been the consequence. There was at least one mile and a half between the two banks. The deep channel had four feet two inches, and after following the left bank for more than a mile, it made a sudden turn re-crossing the river at a right angle with its banks, and having on the left a wide expanse of shoal water. On reaching the right bank the depth was eighteen feet. The laden boats followed soon after mine, they passed the shoal without a stoppage, and reached the Ghat of Hyderabad at 4 P. M.

In the absence of interesting objects on the banks between Roree and Hyderabad, the river itself presented a most lively scene, from the immense number of people engaged in the Pulla fishery. This has been so fully described by Captain Burnes in his interesting travels to Bokhara, that I now allude to it chiefly with the view of recommending the Pulla as an article of consumption among the British inhabitants of Bombay. When fresh this fish has a most delicious flavor, which it preserves even when salted, and it strongly reminded me of the finest herrings of my native country. In the middle of the stream it is caught by single fishermen, of whose peculiar method of securing their prey, Captain Burnes has given an exact description. It is found in prodigious quantities in shoal water, where large nets are employed, and I have seen several thousand taken at one time. It forms a considerable source of revenue to the Ameers of Sindo, the Government share being one in five; the river is farmed out into different beats, varying in extent according to the abundance or scarcity of the fish; some of them being rated as high as 2000 and 3000 rupees for the season, which is only of four months duration. The Pulla is already to be found in abundance in this market, but I had not met with any European who had ever seen it.

I visited the Ameers of Hyderabad, (on the 28th) and having paid their agents the amount of toll due to them, I started on the morning of the 1st of March; I came to late in the evening at Jherka, a distance of more than thirty miles by the river. I met with no obstruction of any kind, and the only circumstance worthy of remark was the diminution of the strength of the current, which was so striking, that on my urging the boatmen to exertion, they asked,

how they could proceed with rapidity, where the water seemed to be standing still. Next day, 2d, made only four or five miles to Molchund, strong winds from the south rendering it necessary to bring the boats to, almost immediately after starting. On the 3d, the wind continued to blow the whole day, with so much violence that it was impossible to move. I started again at dawn on the 4th during which, there being a perfect calm, the boats made great progress, halting in the evening a short distance above Ooplana, nearly forty miles. Next morning, 5th, I entered the Hajamree branch. From Hyderabad to this place, the state of the river did not present a single obstruction to the navigation. No difficulty was found in following the true channel, and the crews plied their oars uninterruptedly without previous examination of the bed of the river. The current was remarkably gentle, not averaging more than one mile and a half in an hour; the soundings never gave less than seven feet, while they often exceeded thirty. I observed few shoals, but as I passed down the whole distance in little more than two days, many may have existed without its being possible for me to trace them. The most conspicuous objects on the banks of the river were the hunting grounds of the Ameers, and the numerous temporary huts of the Pulla fishermen.

I reached Ghorabaree or Vikkur on the 6th at 10 o'clock, A. M. a distance by land, said to be only six or seven miles from the commencement of the Hajamree, but the river winds so excessively, that the boats must have passed over twenty miles at least. For twelve or fifteen miles, the river has a breadth not exceeding forty or fifty yards, afterwards gradually expanding till at Ghorabaree it is about two hundred yards. There the depth near the bank was from twenty to thirty feet; higher up it varied very much, being sometimes twenty and twenty-five feet, and at others falling so low as five and six. The large boat containing salt, grounded twice, none of the others met with any obstruction. The oars were no longer used, tracking alone being found serviceable; in this river the tides for the first time became perceptible, but the rise was very trifling, and in the upper part of the stream, the boats could easily be dragged against it. The banks had few inhabitants and were much covered with the tamarisk. At Vikkur I found three empty sea going vessels of from thirty to forty khurwars burden, and drawing from six and a half to eight feet. I hired them and all the flat bottomed boats to Jooa on the 9th, there being a bar with only seven feet between it and Vikkur. The distance by land is only about two



miles, while by water it is at least four times as much. I remained here on the 10th, 11th, and 12th, during which I hired nine sea-going vessels of various burdens, from sixteen to thirty khurwars, which had arrived from Mandavee and Kurachee in ballast, with the view of obtaining freight at Ghorabaree. Having loaded these vessels, I went to Humbus on the 13th, taking with me eight flat bottomed boats, part of their cargoes still remaining. The river was so winding that it is difficult to form an estimate of the distance by it. It seemed from eight to ten miles. I had employed pilots between Ghorabaree and Joa but finding them quite unnecessary, I dismissed them. The boats left Joa with the ebb tide, at one o'clock in the morning, and reached Humbus at dawn. There was not a person on board who had ever navigated the river, but no difficulty was experienced. The Punjaub and Bahawalpore boatmen were extremely reluctant to accompany me, entertaining the most exaggerated notions with regard to the violence of the tides, and having vague and ridiculous impressions about dangers to be encountered on reaching the salt water;—my chief object in bringing them down so far was to save time. Had I waited at Vikkur, I should have been probably delayed by the larger vessels grounding at the bar below it, and I should have missed the spring tide which I was informed would terminate on the 18th. I should thus in all likelihood have been detained ten days more till its return, for I understand there is so little water at the bar, at the mouth of the river, that it is only with spring tides that vessels drawing eight or nine feet, can pass out to sea. On the 14th I obtained three additional vessels which were passing up to Ghorabaree. As they were in ballast, I soon transferred the remaining cargoes into them, and every thing being ready I started with the tide during the night, having here parted with the flat bottomed boats. I reached Mothara early on the 18th, distance five or six miles. At Joa the water is salt during the flow of the tide, becoming perfectly fresh with the ebb. At Humbus even when the tide is quite out, the water is brackish but the people drink it at low water. The tide had a rise of about five feet, and flowed not only without violence, but at a remarkably moderate rate. The flat bottomed boats were brought to close to the bank, but no precautions were required to keep them off except lengthening or shortening the rope by which they were attached, with the ebb and flow. Early on the morning of the 16th the vessels dropt down close to the buoy, where there was a depth of eleven and half feet, but when I sounded, the tide had been running out for about an hour. The wind was

blowing a fresh breeze from the south, and we were under the necessity of tacking out ; the larger vessels having recourse to warping for three hundred or four hundred yards. The breakers at the bar did not strike me as violent, and we passed them without accident. The breadth of the channel was about seven hundred or eight hundred yards, and the vessel I was in tacked eight times in getting out. It was said that the outer buoy had been carried away during a gale, some weeks previous to my arrival. At sea we had moderate weather and a fair wind, and on the morning of 22d we anchored in the harbour of Bombay.

On the 1st instant a farther investment of merchandize arrived here, consisting of the goods despatched by Captain Wade in the two boats which I left at Ferozpore, and of wheat from Mittunkote and its neighbourhood. The two boats left Ferozpore on the 20th January, and reached Mittunkote on the 15th February, having halted four days at Bahawulpore. The persons in charge, informed me that during the first four days, one of the boats grounded once and the other twice, but he assured me that the rest of the voyage to Mittunkote was completed without a single interruption from grounding, and that when the boatmen had doubts with regard to the depth they merely rested their oars till the difficulty was passed, on no occasion leaving the boats for the purpose of examining the channel. He was detained three days waiting for three boats which were laying in cargoes of wheat a few miles below Mittunkote; having been joined by these on the evening of the 19th, the fleet, now amounting to five heavily laden vessels, carrying from three hundred and fifty to six hundred maunds started early on the morning of the 20th.

The results of this voyage are in every respect highly satisfactory. The boats reached Ghorabaree on the 16th March, without having met with a single impediment from the shallowness of the river, except at Ncorwalla, of the state of the river at which place I have given a description above. Here one of the boats was aground between two and three hours. Another circumstance of a very gratifying nature may be mentioned :—there was only one armed man with the fleet, and no watchmen ; yet no insolence of any kind was offered by the inhabitants on the banks of the river ; and no interruption was experienced. The people of the fleet passed down feeling perfect security, and in their intercourse with the different villages they came to, they met with the civillest treatment.

It is I believe a common opinion, that the navigation of the Indus is attended with considerable risk of property, from the nature

of the stream, the number of shoals, the intricacy of the channel, and the disposition of the inhabitants on its bank. The mode of navigating the river adopted by the boatmen of Sind, has probably given rise to all these impressions except the last. The boats on the lower part of the Indus are employed in the transportation of grain, which is generally the property of the Ameers, and as the people in charge seem more anxious to carry a large quantity than to convey it quickly to market, they fill the boats almost to the water's edge, many of them drawing as much as five feet and five feet and a half. The boatmen find it necessary to keep a pilot boat ahead in order to ascertain with precision the direction of the true channel. They seldom commence their voyage till long after sunrise, and come to about three or four in the afternoon, using their oars very sparingly. The consequence is that they scarcely ever make a greater distance than eight or ten miles in a day, even with the advantage of the downward current. Many of the people assured me, that when the boats got aground, it was very difficult to get them off, and that they sometimes went to pieces, instances of which they said had lately occurred at the shoal below Noorwala. If this account be true, either the men must work with little spirit or energy, or the boats to which serious injuries occur from grounding, must be old and of inferior construction. Several of the boats with me were very deeply laden, especially two with salt and two with grain. In these there was less than six inches between the water and the edge of the gunwale, and I found it necessary to add some planks to prevent the water getting over the gunwale to the cargo. They were likewise much longer and more unwieldy-looking than the Sindian vessels, yet when driven by strong winds on shoals, or against sand-banks, they never sustained the slightest injury, and as soon as the wind moderated were in every instance easily set afloat. I was informed that Sindian boats which drew no more than three or four feet likewise employed a pilot boat, which appears to me to be perfectly unnecessary, and to arise merely from habit. None of the boats with me drawing more than three feet nine inches. I had recourse to this precaution only on one occasion at Noorwala; and on making an average of the number of times that the boats grounded between Mittunkote and the sea, a distance of five hundred miles, I found that it is under one for each boat. The five boats that followed me, made the same distance in twenty-four days, including several unavoidable delays, and only one boat grounded once, though neither pilots nor pilot-boats were ever used, and though none of the boatmen had ever sailed on the Indus before.

The average of the grounding of the boats with me would have no doubt been considerably diminished, had I urged the crews less than I did. I tried to stimulate them to exertion by offering small rewards to the quickest sailers. I desired them not to keep together, and directed that the boat in front should come to at the first eligible spot after sunset, whether near or at a distance from an inhabited place. To secure obedience to my orders, I put a Choprassee in charge of each boat. The consequence was that there was often a distance of five or six miles between the front and rear boats, the latter of which frequently did not reach the halting ground till it was quite dark. In this way the boats had little opportunity of following in each others wake, and they were obliged to find the deep channel in distinct parties of two or three though they were sometimes all completely separated, especially during the prevalence of high winds. Only two of my boatmen had ever been at Hyderabad, but their services were never resorted to for discovering the true channel, and the crews seldom brought to in the centre of the stream, finding it in general quite sufficient to rest on their oars when there was doubt regarding the depths. No injury happened to any of the boats from shoals or the falling of the banks, which in fact scarcely excited the attention of the boatmen. The only accident that occurred throughout the voyage was an injury sustained by two boats that ran foul of one aground, but it was so slight, that they proceeded upwards of one hundred miles to Roree without being repaired.

From the accounts given above, it will be seen, that during the present season three distinct mercantile voyages have been made on the Indus and Gahra, two down these rivers and one up. Each exhibits very favorable results with regard to the facilities for navigation, and to the peaceable disposition of the inhabitants. Respecting the latter there might have been some doubt had the fleet under my charge alone made the voyage, for it might then have been supposed that the presence of a British Officer had deterred the people from plundering. The fleet that followed me, and the boat sent up the river by Mahomed Rahim Khan, were quite unprotected; and yet the people every where experienced the same civility which was offered to me, and no obstacles to free intercourse were ever experienced. Both Bhawul Khan, and the Ameers of Sind expressed to me the utmost confidence in the British Government, and evinced a strong desire to draw closer the ties now existing between them and the paramount authority of India.

The distance from Hareke Puttun to Vikkur, the present port of the Indus, may be estimated at one thousand British statute miles. The voyage between these points occupied two months and two days, while the actual number of sailing days was only thirty, making the average of each day thirty three and three quarters miles. I met with detentions which would not occur, if the river were once established as a channel of commercial intercourse.

As far as the experience of two voyages can be depended on, (viz. that of the fleet which accompanied, and that of the one which followed me), it seems fair to conclude, that the distance from Hareke to the sea may be easily made in one month and a half, including stoppages, even when the river is at the lowest. Were boats however to leave the upper country in October and November, when the current has considerable force, there can be little doubt that the sea might be reached in less than a month ; other and most important advantages would result from commencing the voyage at the earlier period. The merchants bringing goods to Bombay would be enabled to remain there for some months, during which, they would have an opportunity of effecting their sales leisurely, and of taking advantage of any change in the market for the purchase of their return cargoes. They would likewise enter the Indus for the upward passage at the most favorable period of the year. It will be seen that I frequently met with strong southerly winds, which though they proved a serious hindrance to boats descending, would be of immense advantage to those ascending the river. The wind blows from the south as early as February, and prevails from the same direction till the middle or end of June, extending with tolerable regularity from the mouth of the river as high up as Schwun ; beyond which, though of frequent occurrence, it is less to be depended on. On the Gahra the wind during the same period, especially in the months of April, May, and early in June has a south westerly direction, affording considerable facilities to the upward navigation.

But under the most favorable circumstances, the tedious process of tracking must be chiefly relied on ; and it can scarcely be expected that laden boats should traverse in less than three months the great distance from the Sea to Hareke, against a stream having acquired accelerated force from the melting of the snow of the Himalayas.

Tracking too is attended by considerable difficulties, for there are no roads on the banks of the river, and the tamarisk and grass jungles are so thick, that it is at all times a most laborious, and of-

ten a hopeless task to penetrate them. A good deal of lea way is likewise made in following the true channel as it crosses and recrosses the bed of the river. Although the average rate of the current is under three miles for the upper part of the river, and under two, for the lower; yet it frequently runs for short distances with much more rapidity, especially at the sharp angles in the windings of the river, or where its banks have been recently undermined. This occurrence which was always hailed with pleasure by us, would seriously impede the trackers, whose boats might, perhaps, in such situations, be liable to accidents from the falling of banks, though I am convinced that little danger need ever be apprehended from this cause.

In offering the following remarks with regard to the size and form of boats best fitted for the navigation of the Gahra and of the Indus below Mittunkote I beg to premise, that I have had an opportunity of observing these rivers only when they contain the least body of water. It seems to me that the boats must be flat bottomed, and that they should not draw more than three feet nine-inches, or four feet at the most, when laden, but three feet six inches would be still better. It is in vain to hope that boats with a keel can navigate the Indus, till at least we have much more experience. If keeled boats were built for that river so large as to draw more water than I mention above, they would not only be quite useless, but would be constantly liable to be upset. Were such a boat to run against a shoal where the current had a velocity of four or five miles an hour, (which even when I passed down was sometimes the case near banks lately overthrown), it would in all probability heel over so much as to fill with water. The best length for a boat intended to carry freight, is from sixty to sixty five feet, with a breadth of from eleven to thirteen. The depth from the floor to the gunwale should not exceed four feet or four and a half.

In a former part of this report I mentioned that Bahawalpore and Jhelum boats have very high sterns, whence the men at the helm are enabled to keep a good look out for shoals and sand banks. The height, however, is in other respects a disadvantage, offering a resistance to the wind, and rendering a very clumsy helm necessary. Larger boats than those which I recommend for freight, might be advantageously used for passage or for the transporting troops, for being lightly laden, they would draw little water, and would never run the slightest risk of injury from shoals. The boats for carrying stores might be of the smaller size.

In the fleet under my charge, I uniformly found that the larger the boats the more unmanageable they were, even though manned by larger crews in proportion. In high winds they always lagged behind, frequently grounding, whereas the smaller boats were comparatively easily managed and never grounded. In passage or transport boats, the choppers ought to be as low as the convenience of the people on board will admit of, for during high winds, lightly laden vessels with high choppers are constantly driven on the lee bank, and remain much behind those of heavier burden, the cargoes of which are little raised above the gunwale.

At present the mode of levying the toll, without reference to their burden, offers a premium on the construction of large boats, and, as one class of boats alone is likely to be built for the Indus, as long as the existing treaty is in force, few experiments for improving them will be made, room being the grand desideratum. Steam alone is wanting to render the upward navigation rapid and certain. In the cold season Hareke Pottun, might easily be made from the sea by a steam tug in a month but we may I think safely calculate on a shorter period. The distance is one thousand miles, and if fifty miles were made a day, twenty days would be the time occupied.

In speaking of the high sterns now in use, I ought to have remarked, that I fear they will be necessary, till steam is had recourse to, for a light cargo, such as cotton, wool &c., would be raised so high above the gunwale that if the steersman sat low, he would be unable to trace the changes in the channel.

Most of the villages on the banks of the river had groves of babool and bacr trees, to the growth of which the soil seemed very favorable, some of them having attained a greater size than any I had ever seen before.

A shrub called by the natives *lanu* is found in great abundance on the borders of the desert. I have never seen it, but it is described as not exceeding four or five feet in height, having a thick stem which is said to burn with a very powerful flame. In the market of Bahawalpoor, it was so abundant, that its price was not much greater than that of the tamarisk.

During my progress down the river, I took notes with regard to the productions, manufactures, and trade of the countries through which I passed, and I was desirous to insert here my observations on these subjects, but I am deterred from doing so at present, as the hurried manner in which I found it necessary to proceed, afforded me imperfect opportunities of acquiring full or accurate information.

On my return voyage, however, my slow progress against the stream will enable me to extend my enquiries, especially as I shall have it in my power to select my own points of observation, and to visit many important cities, such as Talta and Shikarpoor, which anxiety to effect the voyage in time, compelled me to pass unnoticed. The field has been already ably explored by Captain Burnes and Lieutenant Leech of this, and Captain Wade and Lieutenant Mackeson, of the Bengal Presidency, and little is left for a follower in their footsteps but to exhibit in one view the result of their labours. It shall be my duty to do this in my final report to the Government of India, accompanied by such additional observations as my opportunities will enable me to make.

Two public sales of part of the investment brought here by me, have taken place. A few of the drugs and dye stuffs obtained very advanced prices, others were disposed of much under their original cost, and many found no bidders. The demand for these articles existed only among the native population, and it appears to me that they held back in their offers, under an impression, that we should be obliged to sell the goods in a hurry, and consequently at a disadvantage, as the season for our return up the river approached. Many of the articles sold, still remain in the godowns, the purchasers though repeatedly urged, having neither carried away the goods, nor paid the purchase money. About one third of the shawls were sold by public auction on the 17th instant.

The most valuable part of the investment being still undisposed of, and several of the remaining articles such as wool, cotton, silk, salamoniac, safflower and saffron, being those which are likely to prove the great staples from the Punjab and neighbouring countries, I shall defer my concluding remarks, till I have obtained full information with regard to their qualities and adaptation to this market. In an appendix, I will give a list of all the articles, showing their quantities, their original price, the cost of conveyance from Hareke to Vikkur, and thence to Bombay, the amount of toll, and the prices obtained here.

I have the honor to be,

Sir,

Your most obedient servant,

(Signed) A. C. GORDON.

*Assistant Surgeon, on Deputation &c, to Bombay.*



**II.—Some account of the western portion of Márwár, commonly called Mullání.** By F. Forbes. A. M. Assistant Surgeon.

The ancient Márwár or Márusthal, signifying a desert country void of water, of which Mullání formed the western part, comprised a much greater extent of country than that so called at the present day. The name Mullání, is derived from Mullínáth, the lineal descendant in the ninth degree of the Ráthor chief Seoji of Kánoj, who established himself at Kher near Tilwára, about the year Samvat, 1200, or A. D. 1143. The separation of the country round Kher, or Mhewá, from Márwár proper, took place in the life time of Mullínáth, who allotted the later to the descendants of his brother Vírámji; and the former, with all that part now known by the name of Mullání, to his own sons.

Mullání thus implies the whole of that tract ruled by the lineal descendants of Mullínáth; and is between Lat.  $24^{\circ} 40'$  and  $27^{\circ}$  N., and Long.  $71^{\circ}$  and  $72^{\circ} 30'$  E. Its extreme length from N. N. E., to S. S. W., between the district of Pohkurn and the village of Khejriyáli near the mouth of the Lúní river, is one hundred and forty miles; and its breadth from E. to W., between Gopri and Gurah, nearly one hundred miles. The average breadth is sixty-one miles, and the mean length ninety-six. It is bounded on the N. by the territory of Jassálmír, on the E. and N. E. by that of Jodhpur or Márwár, and on the S. W. by that of Sinde.

Mullání is divided into the districts of Mhewá, Rárdhrá, Kotrá, Barmír, that of Pohkurn is sometimes included. Kotrá and Mhewá form the northern and eastern portions, Rárdhrá is to the south, and Barmír joins the Sindian territory on the S. W. The Thákurs of Kotrá are subject to Jodhpur; in Mhewá are the possessions of the Rawls of Jossol and Sindhri; Rárdhrá is divided between the Rawls of Gúrrá and Nagar, and the district of Barmír belongs to the Barmír Thákurs.

Except on the banks of the Lúní river, the whole of Mullání has a waste and barren aspect, exhibiting a constant succession of sand hills, varying from twenty to one hundred feet in height, generally clothed with a stunted and scanty jungle, which in the ravines between the hills becomes, in many places, thick and luxuriant. The villages are numerous, considering the nature of the country and the scarcity of water, and, although in comparison with the adjoining fertile province of Gújarát, Mullání may be termed sterile, yet it is far from being a desert; as throughout its whole extent there is a

great abundance of forage, and in favourable seasons the cultivated lands near the villages yield excellent crops. The western part of the district near Balmír is very mountainous and rugged; water being easily procurable on the banks of the Lúní, the country is there well cultivated and thickly inhabited.

The Lúk rises from a tank near the village of Bhuníyáná in the district of Pohkurn, and runs in a southerly direction for about sixty miles, when it joins the Lúní at the village of Gol. It is a very small and scanty stream, even in the rains, but is quite dry for a great part of the year. The Lúní or salt river, is of considerable size when full: it rises some distance to the east of Palí, and running nearly due west by the town of Walotrú, receives the Lúk at Gol, whence it continues its course in a south-westerly direction to the Runn of Kutch. Occasionally, during the rainy season, it is only fordable at a few places between Gol and its mouth; the best ford is at Nagar Rádrú. It continues however in this state, at most only for a week or two, and for six months of the year its bed is nearly dry, or containing scattered pools of brackish water. There is however, always abundance of water to be had by digging to a depth of three or four feet in its bed, or from ten to fifteen feet near the banks; but it is all more or less brackish, as the water of the river is even when swollen by the rains, hence its name Lúní Naddí, or salt river.

The Dugri or mountain range, extends from Tsetun to beyond Shiro, between Lat.  $25^{\circ} 36'$  and  $25^{\circ} 56'$ ; the general direction of the hills being extremely irregular. Most of them however, are abrupt and precipitous to the S. W., while the eastern sides slope gradually down to the plain below, or are met by sand hills of considerable height, affording favourable sites for villages which are almost universally built on the eastern declivities of such hills.

The Balmír hills are the most easterly of the range, and the highest one, about half a mile to the N. W. of the town, is seven hundred feet above the level of the plain, and of a conical form. The town is built partly between, and partly on the east sides of two smaller hills, forming the verge of the range, one about four hundred, and the other three hundred and fifty feet high. The latter, on which the best of the houses are built, is surmounted by a small gūdh of loose stones, containing a reservoir for water. The narrow space between the hills opens out a little behind the town, but soon contracts again into a steep and difficult pass, which leads over a ridge or offset from the large hill into the plain to the westward.

From Balmír the hills diminishing gradually in height stretch in nearly a northerly direction, past the village of Gíngám and Bádres to Veshálo. Six miles to the northward is the Lúní hill, near a

small village or rather wand of the same name. This hill is about two hundred feet in height, sloping to the eastward, but steep on the west side, which shows a bed of sandstone which is known to have been quarried at least as early as A. D. 1054, by the date on a small temple at Tsotun, which is built of the same stone, as are also the ruined temples at Júná and Kerárú. It has however been abandoned for many years.

Ten miles W. S. W. of Bálmr is the hill of Jessái, which rises to a height of one thousand two hundred feet above the plain, having the small village of Jessái in a ravine on its N. E. side, and the ruins of the former town at the eastern end. This hill is extremely rugged and difficult of ascent, and is thickly covered to the very summit with jungle. The granite bed on the top exhibits deep and extensive fissures, and the larger blocks are hollowed out on the sides facing the westward in the same manner as soft rocks when exposed to the action of the sea. A mile and a half to the eastward of the village, and near the ruins of the old town, is a deep ravine about three hundred feet above the plain, being the termination of a huge rent which is visible on the summit of the hill. It is at least one hundred feet in height, the rock on each side being perpendicular and in some places approaching within a few feet of each other at the top. The entrance is about thirty feet in breadth, gradually narrowing for a considerable distance, until the fissure is only a couple of feet wide. From various spots on the southern side of this ravine, scanty springs of pure water issue, but during the hot season they are nearly dried up.

The hills of Kerárú and Syáni lying due W. of Bálmr, are in fact the same; the village of Syáni being situated on the western, and the ruined town of Kerárú on the eastern side; the two principal peaks being named respectively. This hill is of no great height, nor is it worthy of particular notice.

The Júná hills, fourteen miles S. W. of Bálmr, form an amphitheatre nearly twenty-four miles in circumference at the base, and enclosing a valley of two miles in length by half a mile of average breadth. The entrance is from the northward, by a narrow passage formed by the sinking down of the hills on either side. In front and to the right of this entrance is situated the village of Júná, consisting of a few wretched huts. At the southern end of the valley, there is a very rugged path, which leads into the open country between the two highest points of the hills, which on the E. and W. of the valley rise one thousand two hundred feet above the plain.

In most places the ascent of these hills is extremely difficult, from the ruins of the town, however, a steep and rough track leads to the ruins of a very ancient fort and reservoir for water, near the western summit. The pass at the southern extremity is impracticable for loaded cattle, and will only admit two persons abreast.

The isolated hill of Tsotun or Chotun, thirty miles S. W. of Bál-mír, is of an irregular quadrilateral shape, and rises to a height of one thousand five hundred feet, rugged and almost inaccessible. The granite of which it is composed, shows itself in immense rounded blocks, the crevices and hollows between which, are filled with thorny jungle and creeping plants, so as very much to obstruct the ascent. The highest peak is directly over the ravine in which the town is built, on the east side. In this hill are five springs of water, two on the western, and three on the eastern side; all of them at a considerable height above the plain. The most plentiful one is in the gorge of the ravine, behind the town, and yields a small stream of water of great purity. The other two on this side are towards the southern corner of the hill, one about five hundred, and the other eight hundred feet above the plain. The discharge of water from these springs is very scanty, but the appearance of the ravines leading to them is in the highest degree wild and picturesque. Around the lower of the two, are many small temples, some of them neatly executed, and the rocky path leading from the town is worn as smooth as glass by the feet of the numerous pilgrims who have for centuries resorted to the sacred springs. The hill of Chotun is rugged and steep to the very summit, which shows no level space, but enormous blocks of granite so piled on each other, as to appear from the plain below as if artificially placed, leading the observer to take them for buildings, of which however there is no trace.

Thurátro hill, which lies somewhat to the southward of Júná, is a long curved rocky ridge of moderate height, having its convexity to the S. E. the small village of Thurátro being situated on the opposite side. Near the centre of its northern side, and near the base of the hill, is a well in which the water approaches within a few feet of the surface in the dry season, and is said to overflow during the rains.

The hill of Ránígám, about ten miles to the southward of Bál-mír, rises to a height of one thousand feet above the plain, having the village of the same name at its eastern base; it is free from jungle, and much less steep and rugged than any of the others. It has been said that there is a spring of water in Ránígám hill, but

this does not appear to be the case. Its composition and arrangement resemble those of Júná.

The only other hills in Mullání worthy of notice, are the isolated ones of Dhundáí and Jusol, both of them porphyritic, of a conical shape, and about five-hundred feet in height. The range of hills which commences a little to the westward of the town of Nagar Mhewá, runs for some distance to the eastward, then turning abruptly to the south, passes Jallor and unites with a branch of that chain which divides Meywár from Múrwár, and which stretches to the westward from between Sírohí and Abú.

In several parts of Mullání, but particularly in the open country to the eastward of Bálmír, are plains of some extent, the soil consisting of loose sand or coarse quartz gravel resting on a rocky bed. The jungle here is more thinly scattered, and some spots are entirely free from it. These, when they have a thin coating of sand, or when the surface is at all soft, are appropriated for the purposes of cultivation.

At Kúrlo and Sívkur to the eastward of Bálmír, are extensive gypsum beds, situated in deep valleys between the sand hills. In the whole tract of country from Kúrlo to Chándesro near the Lúní, these gypsum beds are of frequent occurrence. In depth they seldom exceed three feet, resting on a bed of sand, and varying from fifty to one thousand yards in extent. The soil here is pure sand, not even a pebble to be found on the surface.

Between Kher and Sájíyálí to the north of the Lúní, is a tract of salt marsh or Runn, from which large quantities of salt are manufactured. The extent of this Runn, which is very irregular in shape may be five miles in diameter. Due west of Bálmír near the isolated hill of Ridáná, is another salt marsh about five miles in length and two in breadth. Besides these there are many places near the Lúní where the soil is strongly impregnated with salt, and even in the dry bed of the river a saline crust is left by the evaporation of the water.

Considering the arid appearance of the country, water is not so scarce as might be expected. There are no lakes or tanks supplied by springs, but every village has one or more artificial ones, which afford a supply of water for five or six months from the setting in of the rainy season. As few or none of the tanks contain water throughout the year, the only dependence during the hot season, is upon wells. On this account, wherever water is found by digging, a "wand" or village is immediately established; and if the wells belonging to any

such place should happen to fall in, or get choked up, it is forthwith deserted, unless the owner of the village will go to the expense and trouble of rebuilding, or clearing them out. In the sandy tract of the country to the S. E. of Balmír, as far as the bank of the Lúni, there are no villages, and only a few wands, or shepherd stations, where water is procurable, and this is so scarce, that between Balmír and Gúrá Rárdhrá a distance of forty-eight miles, there are only two wells, viz. those of Nokrá and Chotímohito, which are within five miles of each other; they are situated in low ground at the bases of large sand hills, in a bed of limestone nodules or kunkur. Below the gypsum beds of Kúrho and Sívkur, and, generally speaking, wherever the gypsum shows itself, water is abundant and near the surface. At and around Balmír the depth of the wells varies from fifty to one hundred and thirty feet, but in the sandy tract between that town and Gúrá it is never less than one hundred and fifty, and in several instances upwards of two hundred feet. The four wells at Balmír, situated in the plain close to the eastern base of the hills, are of the following depths, eighty-three, one hundred, eighty and seventy-two feet; and the depth of water was in each eighteen, six, ten, and seventeen feet respectively in the month of June 1837. The well at Lúgrá, three miles S. W. of Balmír, is ninety-nine feet deep, and had twenty-six feet of water in it, and that of Gehúngám, four miles north of Balmír, is seventy-two feet deep with twenty of water. In the bed of the Lúni water is always found at a depth of two or three feet, and to the eastward of the river, none of the wells are deeper than thirty feet. Throughout Mullání, all the well and river water is more or less brackish, and can only be had pure from the tanks for a month or two after the rains. At Kúrho and Sívkur, as well as several places to the eastward, it is so strongly impregnated with sulphate of lime as to be extremely bitter: six pints of water from Kúrho, although perfectly clear and transparent, when carefully evaporated, yielded one hundred and two grains of sulphate of lime.

With regard to the state of agriculture, Mullání may be divided into two portions; one containing the districts of Balmír and Kotrá, the other those of Mhewá and Rárdhrá on the Lúni river. In the first the scarcity of water, and the sandy nature of the soil limit the efforts of the husbandman to the raising of crops of bajrí, (*Holcus spicatus*,) mung, moth, (*phaseolus mungo*, et *aconitifolius*,) and chaulai,\* during the rains. A few fields of cotton are cultivated where the soil contains a portion of vegetable mould, but it yields

little or no profit. The crops of *bájrí* on the contrary, are often very luxuriant, and in favourable seasons are said to surpass those of any other part of India. No manure is used, nor is a field tilled longer than a few years, when an adjoining portion of the jungle is prepared for the seed, by destroying the bushes and ploughing it up. This again is abandoned after two or three years, and fresh portion entered upon. In *Mhewá* and *Rárdhrá* the moisture and greater richness of soil, and the facility in procuring water, are favourable to the cultivation of wheat which is followed to a great extent, and to the complete exclusion of any other branch of agriculture. On the banks of the *Lúní* the soil is fertilized by the annual inundations of the river, and enriched by abundance of manure. The quantity of wheat produced is very great, and of excellent quality: it is exported to *Bálmír*, *Jáísalmír*, *Békánír* and *Jodhpur*. *Bálmír* and *Kotrá*, with the north-western part of *Mhewá*, afford grazing ground for great numbers of cattle, in so much that parties of wandering Sindians have established many temporary villages or wands, where they keep large herds of cattle, paying a small tribute to the different chiefs of the districts. It happens, however, that the annual fall of rain which is never great, is in some seasons so scanty, that the grass and other crops prove insufficient for the support of the inhabitants and their flocks, when the greatest distress is the consequence, and it is no uncommon thing for a single village to lose several hundreds of cattle. In such times of scarcity, the poorer classes subsist almost entirely on wild fruits and grains, and even the bark of trees. Among those chiefly used are, the seed of the *bhrúv*, *jokhúr*, and *bhrút*, the fruit of the *pílú*, *kher*, *keràt*, and *kúmbut*, and the fruit and bark of the *ber*.





The above summary affords, as far as can be judged, a probably fair idea of the climate of Mullání, as the year 1837 differed in no observable degree from most other seasons, and the fall of rain was considered an average one. It is likely, however, that the situation of the town and camp at Bálmr, under the hills, shows a more confined range of the thermometer, and generally a higher temperature, than would be observed in the open country to the eastward. It is certain that during the month of January and the beginning of February, ice is common at Drodháí, Kúrlo, Nokríá, and other places in the exposed sandy plain, while at Bálmr such a degree of cold, if ever observed, must be very rare. The climate on the whole appears to be very healthy, and remarkably free from any local causes of disease, but it has been observed, that troops arriving there in a bad state of health, do not recover as might be expected, during their stay. The number of observations of the winds for 1837, gives the following results:—

s.w.	Calms	W.	S.	N.	N.W	N.E.	S.E.	E.	Total.
280	203	195	190	151	108	52	26	9	1219

Most of the inhabitants of Mullání are Rájputís, who are the only people possessed of authority; the few Muhammedans found there, being only temporary residents in the capacity of soldiers. The Rájputís here, as elsewhere, are remarkable for their fine manly appearance; even the lowest classes surpass in physical and moral qualities, the inhabitants of the more fertile provinces of India. The occupations of the Rájputís are chiefly agricultural.

Brahmans of various tribes form a considerable portion of the population, they commonly engage in trade, and many of them possess villages and lands. They enjoy many privileges, are exempt from taxes of every kind, and pay no duty for merchandize: on this account they almost monopolize the carrying trade from Sinde and Múltan, to Márwár and Gújarát.

Of Gosáins and Cháruns there are many villages; they hold their lands free, and the Cháruns engage a little in trade.

Juttís or Buníyás of the Jain persuasion, are very numerous. They are invariably shopkeepers and traders; the towns most frequented by them are Bálmr and Jussol, but they are found in every village. A list of the various tribes of the above mentioned classes, will be found at the end of this paper.

Wherever forage is plentiful, and water procurable, at a distance from any village, parties of wandering Sindians settle with their flocks and remain for a period of years, when they either return to their native country, or establish themselves permanently in any eligible situation; the wands which they form gradually become thriving villages.

Their whole property consists of cattle, and they never engage in traffic. They are a brave though peaceable race; a moderate tribute is exacted from them by the chiefs of the nearest towns and villages.

The Kosás who formerly overran this part of the country, but who have been completely expelled by our troops, resembled in a great measure, the Pindáris of the more eastern provinces. They were Muhammedans of various tribes, who had been adherents of the former rulers of Sinde, and who fled from their country on the accession of the present Ameers, who endeavoured at different times to conciliate them but without effect. Spreading themselves over Mulláni, and the territories of Jaisalmer, Jodhpur, and Bikanír, they attacked all who refused to pay black mail, and having induced the chief of the larger towns to enter into treaties with them, either through fear, or through hopes of sharing in their plunder, they assisted the Rawls and Thákúrs in opposing the attacks of the Jodhpur forces, and in plundering the adjoining country. The Rawls of Jussol, Sindri, Nagar, and Gúrra, entertained bodies of them in their pay, as also did the Thákúrs of Bálmir, and although the number of Kosás at any one time in the country, could not have exceeded one thousand five hundred men, they were in reality the rulers of the whole. At last, having extended their depredations to the states under British protection, they were completely driven from Mulláni, whence they escaped into the neighbouring Rajpút states.

Of the early history of Mulláni, little can be collected that is satisfactory, the only records being traditional, such as the genealogical rhymes known to the Bháts. From these materials, however, something might be learned, by any one who had time and opportunity to examine them. This much is certain, that from a very early period, the hills of Júná, Chotun, Bahrmír and Keráru, contained strongholds and flourishing towns, as is proved by the extensive ruins still to be seen. Tradition says, that those of Keráru were the most ancient, and that it was the capital of a strong and powerful Rájá of the race of Purnár Rájputs, who ruled over the whole country between Gújarát and the Indus, until expelled by the Ráthor descendants of Seojí. The rulers and inhabitants appear to

have been chiefly of the Purmár and Tsahúan race of Rájputís. By various individuals of the Kerárú family, were built the forts of Núrkot in Sinde, Júná, Báhrmir, Nágore, Shívíáná, and many others.

Sometime previous to the year Sumvut one thousand two hundred, Seojí, of the family of the Ráthor Rájá of Kanoj, took the town of Pálí from the Bhíls, and subsequently possessed himself of the whole of Mhewá, and the tract of country around Kher, at that time governed by Gowál Rájputís. Seojí's oldest son Asthánjí, succeeded him in Mhewá, while his second son Sonungjí, possessed himself of Idargudh, and another son Ajojí took Dwárká, Okhágudh, and Gírnár. The ninth in lineal descent from Seojí, was Mullínath, the ancestor of the present chief of Mullání, and regarded by them as their patron saint. He resided at Tilwára on the Lúní, and ruled over one hundred and forty villages in Mhewá. When about twenty-five years of age he went to Báugá in Sinde, on a plundering expedition, against a chief named Arbáb Nowrá; when the goddess Adh Suktí appeared to him, and informed him that she would be born as an incarnation in the body of the daughter of Bádrá, a Rájput of the Vála Purmár caste, in the village of Dúdhvá near Kher, and that in due time she would become his wife. About twelve years afterwards, he and a party of one hundred men, when fatigued after hunting, halted at the village of Dúdhvá; the whole of them ate and drank their fill from a small jar of water, and a dish of Kárbá, which they received from the hands of Rúpáde the daughter of Bádrá. This miraculous circumstance recalled to his memory the meeting with Adh Suktí, and he took Rúpáde in marriage. Previous to this, he had been a wild and irreligious robber; he was now initiated in the holy mysteries by Rúpáde and a Kanphatá named Gúrreknath, who taught him a mantr or charm, by which he could become sensible of the glory of the deity. From the daily practice of religion, he became so holy, that whatever he said came to pass, and many marvellous tales are related of him. At length, being on a journey near the village of Dúdhgali, the residence of Bálotrá Tsahúan, married to one of his daughters, he was admonished by a voice from heaven, to prepare to quit this earth. He sent a message to his daughter to come to him privately; instead of doing which, she and her friends went out to meet him with drums and music. When he perceived them approaching, he mounted his horse and ascended towards heaven: resting for a moment on the top of a neighbouring hill, he told the wondering multitude to make his son Jugmál his heir, and to carry his turban to his wife Rúpáde; then giving the

crowd a parting benediction, he disappeared in the clouds. When Rúpáde had proceeded to the place now called Rúpádekápáleá near Tilwára, for the purpose of having herself buried alive, her son Jugmál insisted on her performing satí for her husband; she requested to be allowed a short time for private prayer. Covering herself with her mantle, she remained in seeming meditation, until after some time, her friends opening her mantle, found only a heap of flowers; Mullínáth ro Sthán opposite Tilwára, where the saint used to perform his devotions, the hill near Dúdhýálí, where his horse's feet rested on his ascent into heaven, and Rúpádekápáleá, where his wife disappeared from the earth, are all considered holy places, and pilgrimages are made to them by the Rj púts.

Mullínáth greatly loved his brother Vírámjí, on account of the respect and attention which he paid him, but Vírámjí having left his native place on account of a quarrel with Jugmál his nephew, was killed in battle near Lahore. His widow fled to the desert, where she lived for some time in poverty, but some of her neighbours having discovered who she was, sent her with her son Chúndá to Mullínáth. On some disagreement taking place between Chúndá and his cousin Jugmál, Mullínáth to comfort the former, uttered the following prediction.

Mulli rá murhí  
Vírám rá gudhí.

That is, Mullínáth's descendants shall be dwellers in villages, and those of Vírámjí, lords of castles. At the same time he told Chúndá, that he would find as much land to the eastward as he wished, but, that if at any time, he or any of his descendants looked in the direction of Mullínáth with covetous eyes, or oppressed, or injured any of Mullínáth's posterity, the power of his race would be at an end. Chúndá settled at Dúgar, to the westward of Jodhpur, and from him the present Rájá of that principality is descended. Mullínáth's progeny soon possessed themselves of the districts of Bálmír, Kotrá, Pohkurn, &c. which have remained in their possession till the present day.

Jugpál, the third son of Mullínáth, became ruler of Pohkurn and the surrounding country. Jugmál the oldest son and heir of Mullínáth, had four sons, of whom the first named Mundúluk succeeded him in the government of Mhewá; the second named Lonkájí possessed himself of Júná and Bahrmír; the third Rirmál, settled at Guráb; and Hirbhum the fourth, at Rhídáná. At a later period, the Ráwuls Dúdo and Puttá obtained the possession of Jussol and Sindárl.

At the place now called Jóná or Jóná Báhrmír, are the ruins of the old town of that name, which was so called from the Purmár Rájpút, Bahr Ráo, who built the fort in the year Sumvut 1190 or A. D. 1145. From the extent of the ruins and fortifications, and the number of temples, it is evident that this must have been at one time the most considerable place in Mullání. The valley in which the remains of the old town are situated, is enclosed on every side by steep and precipitous hills, and is entered by a narrow passage to the north. This entrance has been defended by five breastworks of stone, the remains of which are still visible, stretching up the face of the high grounds on either side. On a level space on the hill to the left, is an extensive fort of uncemented stone, from which other breastworks are carried up still higher, until they nearly reach the summit. There are two wells still open, at the entrance to the valley, and three more among the ruins of the town, which occupy the west side of the plain, close to the base of the hill. In the houses and most of the temples, no mortar has been used, the former, in as far as can be judged from the ruins, must have been very small and inconvenient. The temples, of which there are four in tolerable preservation, are well executed. The largest is built entirely of a greyish sandstone, the others are partly of brick. From the ruins of the town, a narrow track or pathway leads up to the S. W. peak of the hills, along a strong breastwork, which at a distance of about two hundred feet from the summit, or, one thousand above the plain, joins a strong fortification on the edge of a deep ravine. Across the upper part of this ravine, a bund has been thrown, so as to form a tank or reservoir for rain water.

When Lonkájí, the brother of Ráwul Mumduluk of Mhewá, and grandson of Mullínáth, obtained possession of this part of the country from the Purmár and Tsalhján Rájpúts, he chiefly resided at the present town of Báhrmír, and since that period, (about Sumvut 1376 or A. D. 1321) Jóná fell gradually to decay. In the appendix will be found the pedigree of the Báhrmír Thákúrs, as well as of the other chiefs of Mullání.

From the time of Mullínáth's death, until the middle of the last century, his injunction to Chúndá, on promising him the sovereignty of Marwár, was held sacred and binding by his descendants, the Rájás of Jodhpur, who claimed only a nominal sovereignty over the chiefs of Mullání. This forbearance however, was probably as much owing to inability to enforce their demands, as to any regard for the rights of the chiefs. On numerous occasions, the Ráwuls and Thákúrs rendered assistance to Jodhpur in time of war, but only on

condition of being remunerated for their services. In the reign of Bugt Sing, the power of the chiefs having been much weakened by quarrels among themselves, the Rájá not only claimed allegiance and service from them as his right, but began to exact tribute by force; the first one who was obliged to pay it, being the Ráwul of Jussol. In Sumvut 1824, or A. D. 1769, a demand of tribute from Báhrmír having been resisted, a force of four thousand men, under Híndú Mull, was sent against them which was compelled to retreat, by the chiefs Ráhatji and Jessáji. After remaining unmolested for sixteen years, they were attacked in Sumvut 1851, by Vujáiráj Sing with ten thousand men under Bhám Sing, who after much hard fighting, and considerable slaughter on both sides, obliged the Thákúrs to pay a fine of three thousand Rupees. In Sumvut 1858, they were again attacked by an army of fifteen thousand men, under Hemraj Sing, who was forced to retreat with great loss. In 1862, after the accession of the present Rájá, Máun Sing, a *dand* of one thousand five hundred Rupees was levied by Goojraj Hákím, who commanded the *tháná* of Jodhpur horse at Siv. After this period, the brother Thákúrs became disunited by feuds and quarrels, so as to be unable to offer any resistance to the Jodhpur troops, who exacted at various times as much as they could. With regard to the connection between the Thákúrs of Báhrmír, and the Rájá of Jásálmír, it appears, that a daughter of one of the chiefs was given in marriage to one of the Jásálmír family, who secured the sovereignty by their assistance. By way of recompence the Thákúrs received a small monthly salary from Jásálmír, but a dispute having afterwards arisen concerning it, a force from Jásálmír assembled at Veshálo, and having prevailed on a number of the principal men of Balmír to meet them, treacherously murdered thirty five of them. The Raja of Jásálmír again requiring their assistance, entered into a written agreement to pay them an additional monthly salary, but this document having been lost at the taking of Balmír by the Bombay troops, the payment has since been discontinued.

The town of Jussol on the Lúni, opposite Wálotra, is of considerable antiquity, but was enlarged to its present size, and the fort first built by Ráwul Dudaji, the ninth lineal descendant of Mullínáth. Although it has suffered much from the attacks of Jodhpur, and from the neighbourhood of the flourishing town of Wálotrá, it is still of considerable size, and the fort which is placed in the face of the conical hill above the town, is extensive and well built, but commanded by the surrounding heights. The district of Jussol is by far the richest and most fertile of Mullání, comprising nearly the whole

of Mhewá. The first aggression of Jodhpur on Jussol took place in the reign of Rájá Shúr Síng, who deprived Ráwul Dudáji of the village of Gopri near Kher. In the reign of Rájá Ajá Síng, the villages of Panchpádro Mándhpuro, Kúplio, Surajvero, Nuotullo, Phulsúdh and Asúko were lost by Ráwul Jetmál. The uncle of Bugt Síng, father of the present Ráwul, having usurped the chieftainship of Jussol, Bugt Síng applied for assistance to Rájá Vijaí Síng of Jodhpur, through whom he recovered his rights, and in consideration of which, a sum of three thousand Rupees was paid to the Rájá. After this period, the family became so disunited by feuds, as to fall an easy prey to the demands of Jodhpur, which were frequently made, and compliance insured by force. The Ráwul, although he renders service to Máun Sing, asserts that he does so only when paid for it, and that the sovereignty of Jodhpur is maintained not from right, but by force of arms.

The chief town of the southern part of Mhewá is Sindhrí on the Lúni, an open place of no strength or importance. The present Ráwuls are descended from Puttáji, brother of Ráwul Dudáji of Jussol, and son of Ráwul Megráj. The first aggression and demand of tribute, or "Fouj bul," by Jodhpur, took place at the same time as at Jussol, and the payment of it has been enforced at intervals since 1739.

Nagar Rárdhrá, an open town on the west bank of the Lúni, and fifty miles from Báhrmír, is the seat of the Ráwuls of Nagar, chiefs of the northern half of the district of Rárdhrá. They are descended from Jetmál, brother of Mullínáth, and ruler of Shiváná. Jugmál son of Mullínáth, killed his uncle Jetmál, whose son Khem Kurun, after his father's murder, retired from Shiváná and took Nagar Rárdhrá from the Tímá Sivár Rájpúts; his posterity retained undisturbed possession of it. Bugt Singh and Ubhe Singh, when passing through Nagar to attack Ahmedabad, received the present, or tribute of a horse from Ráwut Bullúji, who died in Sumvut 1810, A. D. 1755, and was succeeded by Suváji, son of Khem Kurun. In Sumvut, 1813, an army from Jodhpur plundered the country and levied a fine. The Jodhpur troops afterwards returned at intervals of two or three years, with various success. When the Ráwut was taken by surprise, he was compelled to satisfy their demands, but when aware of their approach, he took refuge in the desert, or the hills of Mhewá, until they retired. When Máun Sing the present Rájá of Jodhpur was besieged in the fort of Jalor, before his succession to the Ráj, Deví Sing the younger Rawut, rendered him some important services, for which the Rájá afterwards presented him with a flag,

a kettle drum, and enám village; and in Sumvut 1875, gave him and his brother a written discharge against all future exactions. The other two chiefs however, Múloji and Ekaroji, still pay tribute.

The town of Gúrá was built about the year 1600 Sumvut, by Ratn Sing of the family of Nagar Rárcrá, for his second son Kulláji, whose descendants still possess it. It appears that in former times, the Rawut of Gúrá paid, in token of allegiance, the annual tribute of a camel to the Muhummadan chief of Páhlunpur, then residing at Jálór. When Jálór was taken by Guj Sing, Rája of Jodhpur, he demanded tribute from Rawut Isarji, who retired with his followers to the Júná hills, where gathering strength, he made head against the Jodhpur troops, and plundered the country about Jalor for nearly 60 years. When at length he was old and worn out, a force was sent against him by Bujai Sing, and he was obliged to pay a heavy fine. The Jodhpur force afterwards returned at intervals for the purpose of exacting tribute, but they never obtained it without hard fighting, and when they retired the Rawut generally retaliated by laying waste the púganah of Jalor. On the death of Rawut Bhákhur Sing, his brother Súrajmull having attempted to usurp the power from Máldaji, and being expelled by the inhabitants, called in the assistance of the Jodhpur Rája, by whom he was placed on the gaddí, in conjunction with Máldaji. From this period, the tribute was sometimes exacted sometimes not, but never without fighting. In Sumvut 1784, after a hard battle with the Jodhpur troops, Rawut, Thákúrsh fled from Gúrá, which was plundered, many of the inhabitants carried off, and heavy ransoms exacted. The Jodhpur force again attacked Gúrá in Sumvut 1779, and Thákúrsh not being able to make any resistance fled to Pohkurn, and for five years subsisted by committing robberies in the Jodhpur territory. In order to put a stop to this, the Rája reinstated him at Gúrá on condition of receiving a tribute of two thousand two hundred Rupees yearly, from A. D. 1823, which he was obliged to comply with, as from the advance of the British troops in this direction, he had no place to retreat to, and but little hope of being able to support himself by plunder.

Kúmpáji, the brother of Jugmál, having slain his uncle Rámdeo, got possession of Siv, and peopled the town of Kotrá, where there had been a ruined fort from very ancient times. His descendants ruled peacefully over the district until Sumvut 1823, when the two Thákúrs quarrelled, and having called in the Jodhpur troops to settle their differences, the Rája seized the town of Siv, and half the district of Kotrá; and a tháná of his horse occupied Siv, until 1850



when they were expelled, but soon replaced again by Bhīm Sīng, who levied a heavy fine on the Thākúrs. At present the revenues of the district are collected by the Jodhpur Hákím, and one half paid over to the chiefs. Although a garrison was kept at Siv, the Kosas continued to exact tribute or "black mail" from the Thākúrs until they were expelled by the Bombay troops.

Since the detachment of Bombay troops has been stationed at Bhármír, a great improvement has taken place in the condition of Mullání, which is in a great measure owing to the judicious management of the Commandant and Political Agent Captain Richards. Formerly the chiefs, in order to avoid the exactions of the Rájá of Jodhpur, were compelled to call in the assistance of the Kosas and pay them largely for their aid, the miserable inhabitants plundered on every hand, could barely find means of subsistence. After the expulsion of the Kosas, and the interference of the British government between the Jodhpur Rájá and the chiefs, the country soon exhibited a state of perfect tranquillity. Trade began to revive, old wells were cleared out, new ones dug, additional ground brought under cultivation, and small settlements made in many places, chiefly by parties of Sindians. An arrangement having been made, by which a moderate annual tribute, sufficient to satisfy the claims of Jodhpur, without oppressing the inhabitants, should be paid into the hands of the Political Agent at Bhármír, and by him transferred to the Jodhpur government, disputes with the Thākúrs are thus prevented. This arrangement appears to answer every purpose, and will, no doubt, do much to improve the condition of the people. Throughout Mullání, for several years, there has not been a single instance of a robbery : and the contrast between the state of society there and in Guzerat, is sufficiently striking—from a country where a child might walk openly with gold in his hand, you arrive in one where the most daring robberies are of daily occurrence, and where, even in every camp, each house must be protected by a hired thief.

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# GENEALOGY OF THE RAWLS AND THAKURS OF MULLANI.

Rájá Sýojí of Kanoj, Sumvut 1200.

सीयोजी

- |   |                                       |   |
|---|---------------------------------------|---|
| 1. Rájá A'sthánjí of Mhewá.<br>आस्थानजी residing at Khér. | 2. Sonungjí of<br>सोनुंगजी Ydhurgudh. | 3. A'zójí of Okhágudh<br>अजोजी Dwráka and Gírnár. |
|---|---------------------------------------|---|

- |                  |                        |
|------------------|------------------------|
| 1. Dúhd<br>दुहदू | 2. Dhándhul.<br>धांधल. |
|------------------|------------------------|

From whom the inhabitants of Mábár near Bährmir, and Kherú near Jodhpur are descended.

Rao Ráypál रायपाल.  
Rao Kánráo कानराओ.  
Rao Jálanshí जालनशी.  
Rao Tsámhá सामा.  
Rao Timbo तीमो.

- |                         |                            |                          |
|-------------------------|----------------------------|--------------------------|
| 1. Rl. Kandé<br>कानडदे. | 2. Tribunshí.<br>त्रिभणशी. | 3. Silkhojí.<br>सिलखोजी. |
|-------------------------|----------------------------|--------------------------|

- |                                   |                                 |                   |                     |
|-----------------------------------|---------------------------------|-------------------|---------------------|
| 1. Mullínáth<br>मुलीनाथ of Mhewá. | 2. Jetmal<br>जैतमाल of Shívíná. | 3. Vírám<br>वीरम. | 4. Sobhut.<br>सोभत. |
|-----------------------------------|---------------------------------|-------------------|---------------------|

Chundají of Mundhovar and Jodhpur.

- |                      |                     |                      |                     |                  |                   |                      |
|----------------------|---------------------|----------------------|---------------------|------------------|-------------------|----------------------|
| 1. Jugmál.<br>जगमाल. | 2. Kumpa.<br>कुंषा. | 3. Jugpál.<br>जगपाल. | 4. Arbál.<br>आरबाल. | 5. Kurn.<br>करन. | 6. Meho.<br>मेहो. | 7. Súrshí.<br>सुरशी. |
|----------------------|---------------------|----------------------|---------------------|------------------|-------------------|----------------------|

Ruler of Pokhurn.

Mullínáth had five wives, their names and children as follows:—

- |   |  |
|---|--|
| 1. Mhadodev of the Dhánduyíná caste — Jugpál, Arbál, and Menko-<br>riwurbái | 2. Chundrávul of the Tsowan caste. Shúrshí and Meho. |
| 3. Azurejí of Kach, Kurn.   | 4. Littade of the Sholunkuní caste, Kúmpá.           |
| 5. Rúpade of Valá Punnár caste, Jugmál and Vímabái.                         |  |

## Family of Jussol.

Dudo.	हुदो.
Jugmál.	जगमाल.
Bhármal	भारमल.
Jetmal.	जेतमल.
Kulyánmull.	कुल्याणमल.
Purtáp Sính.	परतापसिंह.
Vusht Sính.	वसुतसिंह.
Surut Sính.	सुरतसिंह.*

## Family of Sindhrí.

Puttá.	पता.
Meheshdáss.	महेशदास.
Khema.	खेमा
Kesrí Síng.	केसरीसिंग.
Ajub Síng.	आजबसिंग.

\* The present Ráwul.

## RAWUL JUGMAL.

1. Rl. Mumhuluk ममलुक of Bhurkot and Kher.	2. Lunkáji लुंकाजी of Júná and Bahrmir.	3 Rimál रडमल of Nílbo and Guráb.	4. Herbbum हर्भम of Rí- dháná.
1. Rl. Bhojráj भोजराज	2. Khetsí खेतसी ances- tor of the Kotrá Ráj- páts.	3. Depo देपो ances- tor of the Jussol Ráj- púts.	4. Víko. वीको ancestor of the Vírían Rájpúts near Nagar.
Rl. Vido. वीदो.			
Rl. Nishar or Sasal. नीसल.	2. Kumbhkurun, कुम्भकर्ण kurná, Vidurlái, and Kulavash Ráj- púts.		
Rl. Versingh. वेरसिंग			
Rl. Hápo. हापो.	2. Ugo of Dhundhálí उगो. and Kít-pálá.		
Rl. Megraj. मेगराज.			
Rl. Kullo कलो of Udepur.	2. Dudo हुदो of Jussol.	3. Putt पतो of Sindhrí.	4. Mumuluk. ममलुक chief of Kurna.

## AJUB SING.

1. Ratn Sing Gúmán Sing Amr Sing	रत्नसिंग. गुमानसिंग. आमरसिंग	2. Háthí Sing हाथीसिंग. • Súrut Sing. सुरतसिंग. Jálim Sing जालिमसिंग. Ram Sing. रामसिंग. • Godur Sing गोदडसिंग.*
1. Jugut Sing जगतसिंग.	2. Jetmál Sing जैतमालसिंग.	3. Abhjí आभजी.
1. Chitr Sing चित्रसिंग.*	Súp Sing सदुपसिंग.	Morjí मोडजी.
2. Kánjí कानजी.	2. Megjí मेगजी .	

## CHIEFS OF BAHRMIR.

Lúnkájí, second son of Jugmál, grandson of Mullínáth.

लूंकजी.

1. Shesho सेषो.	2. Bálo बालो.
--------------------	------------------

1. Jeto जैतो. 2. Sivráj सिवराज.

1. Chando चांदो of Dhormina.	2. Ritto रतो of Bahrmir, Veshálo, Mangtá.	3. Khetsi केतसी of Chotun Síaní, Ranígáum.	4. Hapo हापो of Druro Marúrí.	5. Kampo कुपो of Numgeriá.	6. Nirbut नरबद of Nún near Veshálo.
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## RAWU RITTOJI.

Bhímo भीमो.

1. Kullo कलो	2. Vesál of Vesálo विवाल	3. Buggú of Mangta भगु
-----------------	-----------------------------	---------------------------

\* Present Ráwuls Chitr Sing, and Godur Sing.

## Kulo कलो

1. Dúdo 2. Súrtañ 3. Udè Sing

दुदो खरणाण उदैसिंग

Rám Sing.

रामसिंग

1. Tezmál 2. Bhervdass 3. Raj Sing 4. Jogh Sing

तेजमाल

भैरवदास

राजसिंग

जोगसिंग

Megráj

Venídáass

मेगराज

वनीदास

1. Bhármul

2. Prithiráj

3. Sujáná

भारमल

प्रथीराज

सुजाणा

1. Sahibkhan 2. Lallchund 3. Kishndass 4. Pubojí 5. Kemojí

साहबखान

लालचंद

कसनदास

पबोजी

केमोजी

1. Jessojí

2. Víjo

जसोजी

विजो

1. Másing 2. Jívojí 3. Mudú 4. Súrto 5. Shero 6 Udo

मासिंग

जीवाजी

मडु

खरतो

शेरो

उदो

Súp Sing

सदुपसिंग

1. Dhírjí

2. Jethojí

3. Salum Sing

Kurná

धीरजी

जैठोजी

सालमसिंग

करणा

## DHIRJI.

1. Tejmál

2. Himut Sing

3. Dhonkul Sing

4. Mehráj

तेजमाल

हिमतसिंग

धोकलसिंग

मेहराज

## VIJOJI.

Purtap Sing

प्रतापसिंग

1. Khánjī 2. Venáí Sing 3. Súr Sing

खानजी वनैसिंग खुरसिंग

1. Vánkídáss 1. Nithjī

वांकीदास

नथजी

1. Indr Sing

2. Rúpajī

2. Phungar Sing

2. Muljī

इंद्रसिंग

रुपाजी

पंगारसिंग

मुलजी

3. Púnjá

पुंजा &amp;c.

## SURTOJI.

1. U'mjī

उमजी

2. Venáí Sing

वनैसिंग

Guzo

गजो

3. Bhákhur Sing

भाबरसिंग

1. Bádr Sing

बादरसिंग

2. Vágo

वागो

## SHERSING.

1. Bhugjī

भगजी

2. Rámá

रामा

## U'DOJÍ.

1. Sukho

सूखो

2. Samnut Sing

सामनतसिंग

## LALLCHUND.

1. Mánasing

मानसिंग

2. Kánajī

कानाजी

1. Pudum Sing

पदमसिंग

2. Diljī

दिलजी

## Pudum Sing पदमसिंग

- |                                 |                   |                          |                            |
|---------------------------------|-------------------|--------------------------|----------------------------|
| 1. Rawut Bhabút Sing<br>भभतसिंग | 2. Hemjí<br>हेमजी | 3. Prithíráj<br>प्रथीराज | 4. Gúmán Sing<br>गुमानसिंग |
|---------------------------------|-------------------|--------------------------|----------------------------|

## KISHINDASS.

- |   |                       |                              |                              |
|---|-----------------------|------------------------------|------------------------------|
| <div style="display: flex; justify-content: space-around; border-top: 1px solid black; border-bottom: 1px solid black; padding: 5px 0;"> <span>1. A'ndojí<br/>आणदोजी</span> <span>2. Múlojí<br/>मूलाजी</span> <span>3. Bhímojí<br/>भीमोजी</span> </div> |                       |                              |                              |
| 1. Sersing<br>सेरसिंग<br>Hunmut<br>Sing<br>हणमतसिंग   | 2. Mhádo Sing<br>माधव | 1. Bháo<br>Sing<br>भावसिंग   | 2. Sobhá<br>Sing<br>सोभासिंग |
|   |                       | 3. Julár<br>Sing<br>जलारसिंग | 4. Dhirjí<br>डेरजी           |
1. Sálum Sg. 2. Hunmut Sg. 3. Dán Sg. 4. Megjí 5. Jugmál 6. Nárkhan  
सालमसिंग हणमतसिंग दानसिंग मेगजी जगमाल नारकान

## BHI'MOJI'.

- |   |                           |                   |                          |                 |                 |
|---|---------------------------|-------------------|--------------------------|-----------------|-----------------|
| <div style="display: flex; justify-content: space-around; border-top: 1px solid black; border-bottom: 1px solid black; padding: 5px 0;"> <span>हरजमल</span> <span>1. Súrjumull</span> <span>2. Srúp Sing सरूपसिंग</span> </div> |                           |                   |                          |                 |                 |
| 1. Akh<br>आष  | 2. Samíl Sing<br>समेलसिंग | 3. Jagus<br>जागुस | 1. Anar Sing<br>आनाडसिंग | 2. Vágo<br>वागे | 3. Doná<br>दोना |

## PUBA'JI'.

- |  |                            |                     |
|--|----------------------------|---------------------|
| <div style="display: flex; justify-content: space-around; border-top: 1px solid black; border-bottom: 1px solid black; padding: 5px 0;"> <span>1. Háthíjí<br/>हाथीजी</span> <span>2. Jorájí<br/>जोराजी</span> </div>   |                            |                     |
| 1. Pemjí<br>पेमजी  | 2. U'rjun Sing<br>उरजलसिंग | Shersing<br>सेरसिंग |
| <div style="display: flex; justify-content: space-around; border-top: 1px solid black; border-bottom: 1px solid black; padding: 5px 0;"> <span>1. Anr Sing<br/>आनरसिंग</span> <span>2. Múngrá<br/>मुंगरा</span> </div> |                            |                     |

## KHEMOJI.

1. Deváji	2. Mukúnji		
• देवाजी	मुकुंजी		
1. A'idánji	2. Tsútraji	1. Jújár Sing	2. Salum Sing
आईदानजी	चुतराजी	जुजारसिंग	सालुमसिंग
Bhabhútá	Bódho		•
भभता	बोधो		

## FAMILY OF NAGAR RA'RDHRA'.

Jetmálji, brother of Mullínáth, ruler of Shívláná.

Phemkurun	पेमकरण	Bhákbur	भाखर
Ránáro	राणारो	Páta	पाता
Súbram	सुभ्रम	Ratn Sing	रतनसिंग
Vairísál	वेरोसल	1. Askerun	2. Kulla Rl. of Gúrá
		आसकरण	कला
Rághudáss	राघवदास		Munordáss मनोरदास
Súrajmull	सुरजमल		Kes Sing केससिंग
Bullaji	बलाजी		
1. Khemkurn	2. Sivji		
खेमकरण	सिवजी		
1. Sivíaji	2. Bulláji		
सवाईजी	बलाजी		
Deví Sing दिवीसिंग		Kanjí	कांनजी
		Vagjí	वागजी
1. Hukm Sing	2. Amr Sing	Doláji	दोलोजी
हुकमसिंग	आमरसिंग*		
		1. Múláji	2. Ekáráji
		मलाजी*	इकाराजी*



## FAMILY OF GU'RA' RA RDHRA'.

Ráwut Kulláji

I'surji ईसरजी

Thákúrshí ठाकुरशी

Sáhibkhán साहिबखान

1. Bhákhur Sg. 2. Sū.ajmull 3. Devídáss 4. Sádúli 5. A'jojí  
 भाखरसिंग सूरजमल देवीदास सादुल आजोजी

1. Máldá 2. Jívoji 3. Juesing 4. Thákúrshí  
 मालदा जीवोजी जैसिंग ठाकुरशी

1. Uubba Sing 2. Maun Sing

Surajmull

Ser Kurnn सेरकरन

Sívji सिवजी

Sívji सिवजी

Sádulji

Kúshal Sing कुशलसिंग

Málji मलजी

Tejsing तैजसिंग\*

1. Doláji

दोलाजी

2. Sív Sing

सिवसिंग

3. Prithráj

प्रथोराज

A'jojí

Devídáss

{ Vusundáss वसनदास

{ Jónáji जुनाजी

1. Muknojí

मकनोजी

2. Jetmálji

जैतमलजी

Those marked \* are the present chiefs.

*Alphabetical list of the towns and villages in Mullání.*

1. District of Báhrmir बाहरमिर.

Agóriyó	आगोरोयो	Gehún	गेहूँ
Attí	आटो	Hemráj Kádhán-	हेमराजकीढाँ
Bhádhki	भाधका	ní	णी
Blá íres	भाल्लेस	Jálípá	जालोपा
Bhotiyá	बहोतीया	Jásái	जसाई
Chotun	चोटन	Jóná	जुना
Diórfminá	धोरामना	Kápúrdhí	कापुरधी
Dhrócháí	झामाई	Kávus	कावस
Druró	ड्राडो	Keirárú	कैराड

Khárófi	खारोडी	Nímblá	नींबला
Koshshir	कशेशर	Shináu	शनाउ
Úrló	ऊडालो	Siyáni	सीयानी
Lóharyfó	लोहारीयो	Sivkur	सिवकर
Lugeró	लुगेरो	Sunúrá	सुनोरा
Lúnú	लुनउ	Súró	सुरो
Mábár	माबार	Táráiró *	तारातर्रो
Mángtá	मांगता	Undhkó	उंधको
Mátúfi	मांडुडी	Vándrá	वांदरा
Míngeríyó	मुंगेरीयो	Vesháló	विशालो
Nagúrdá	नागुडदा	Rángám	रांगोगाम
Nimbáiser	नींबासर		

## 2. District of Kótrá कोटडा.

Aklí	आकली	Kótrá	कोटडा
Arung	आरंग	Megháro	मेघारो
Bálásir	बालासर	Mókháp	मोषाप
Bhíyásir	भीयासर	Múngáu	मुनगाउ
Bhíyár	भीयार	Múllingól	मल्लिंगोल
Bhímhbudhá	भीमभधा	Nágúrdá	नागुडदा
Bulái	बलाई	Níguilhurí	
Chóchrá	चाचरा	Púsudh	पुसध
Dhárúwí	धारुवो	Rájrál	राजराल
Gúngá	गुंगा	Ráwutrógám	रावतरोगाम
Hurúwá	हडुवा	Rutkóliyó	रतकोलीयो
Ják	जाक	Sáth	साथ
Jámfi	जांफली	Sáwálú	सवालु
Jáscró	जासरो	Sekún	सेकुन
Kánásir	कानासर	Sív	सिव
Kásmer	कासमेर	Tálá	ताला
Khóarl	खडाल	Undhú	उंधु
Kódhíyàiser	काधीयासर	Víshú	वीशु

## 3. District of Mhewá महेवा.

Akundí	आकण्ढो	Bháthó	भाढो
Ashádhá	आषाढा	Bhímurlái	भीमरलाई
Avárl	आवाडी	Bhulkhárl	भलखाडी

Akdaró	आकदरो	Kber	कड
Bhúnká	भुंका	Khókhursur	खेखरसर
Bujávush	बजावस	Kherintló	खेरंटलो
Búrivaló	बुडीवालो	Khutú	खटु
Chándesró	चांदेसरो	Kumithái	कमठई
Chainpúró	चेनपुरो	Kólú	कोलु
Chíbí	चोबी	Kólúr	कालर
Chókhá Rídháni	चोखारीढांणी	Kurná	करणा
Dhánggró	धांगरीओ	Lápúndró	लापुंदरो
Dhundhálí	धंधालो	Loiró	लोईरो
Drúgsiró	द्रुगमडो	Mándhávush	मासांवस
Dhunáuvá	धनाउवा	Míkniná	
Drákhá	द्राखा	Mithó	मीठो
Dúdhwá	दुधवा	Mulawó	मलाउवा
Gádesró	गांदेसरो	Mulináthrostáhn	मालोनाथरोस्थान
Gól	गोल	Nagar Mhewa	नगर महेवा
Goánnó	गोआंणो	Nakóro	नाकोडो
Guráridhánni	गुडारीढांणी	Nimbá ridhánni	नींबारीढांणी
Gurí	गरली	Nowsur	नवसर
Hírá ridhánni	हीरारीढांणी	Padrú	पादरु
Hódhú	होधु	Páucheridhánni	पांचेरीढांणी
Hurun	हरण	Picú	प्रेउ
Jájúó	जाजुओ	Punaúrú	पनाउडा
Járúkhó	जारुखो	Riteú	रतेउ
Jákháridhánni	जाखडारीढांणी	Rúpádekapaleá	
Jerlá	जेडला	Sájíyálí	साजीयाली
Jussól	जमेल	Shámbró	सांबरो
Júndh	जुंध	Sher	शेर
Kállíwá	कलीवा	Shímákyó	सीमालीयो
Kalvurí	कालवडी	Shimírá	समोरा
Kánvur	कानवड	Shiní	सणली
Kántló	कान्तलो	Sindhri	सणधरो
Káspá	कासपा	Siatro	संणतरो
Kesúlá	केसुला	Sóbhávush	सोभावस
Kesúmla	केसुमला	Sódhárídhanní	साढारीढांणी
Kítpálá	कोतपाला	Sowáú	सवाउ
Kiyár	कार	Sunlá	सणफा
Khiphair	कोपसर	Sumurkhíyó	समरबीयो

Táprá'	डापरा	Válásir	वालासर
Tilwára	तलुवाडा	Vámsín	वांसलीन
Timávush	तमावस	Vaytú	वायतू
Utarní	उतरणी	Vedáljð	वेदालीओ
Vághúrf	वाघुडी	Vórávush	वोरावस
Vátáru	वाटाडू	Vuríyó	वुरीयो

#### 4. District of Rárdhrá राउधरो

Alumpuró	आलुमपुरो	Lóláúvá	लोलाउवा
Bhákhurpuró	भाखरपुरो	Lúbhávush	लुभावस
Búrásun	बुरासुना	Mandhávesh	मंधावस
Dángriyá	मांगरीया	Mórsim	मोरसीम
Dhábr	धाधड	Mundávló	मंधावलो
Dhándhelávush	धांधलावस	Nagar Rárdhra	नगर राउधरा
Dhambri	धोंबडी	Þormóhi	नरमोई
Dúdávush	दुदावस	Pádrú	पादरु
Gándví	गांदवी	Páyilá	पायला
Gálíyó	गालीयो	Póyilá	पोयला
Góliyá	गोलीया	Ratupuró	रतनपुरो
Gurá Rárdhrá	गुडाराउधरा	Rurwi	रडवी
Gursá		Silú	सोलु
Hurá		Tantró	तांतरो
Intádó	इंठादो	Tukíyó	टुकीयो
Jálíkæra	जालीखेडा	Undrí	उंदरी
Júndh	जुंध	Váte:ó	वाटेरा
Khúdháló	खुधालो	Vántá	वाटा
Khungdháló	खंधालो	Vodosníyó	विदोसनीयो

May, 1838.

### III.—*Translation of an account of the Kattées taken from the mouths of their own genealogists. Prepared for the Bombay Geographical Society, By James Erskine, Esq., C. S.*

About five thousand five hundred years ago, there reigned in Hustinapoor (or Delhi) seven Kings, who had two sons named Cheetra and Wicheetra, the former of whom had three sons named Pandow, Dhutrasht, and Weedor. Pandow being childless and Dhutrasht

having one hundred sons, the former gave the kingdom to the latter, and retired into the forests for the purpose of performing *tup*, \* and whilst these five sons were born to him, he died shortly afterwards, upon which his widow returned to Delhi with her five boys. At this time six of the hundred sons of Dhutrasht conducted the administration of the affairs of the kingdom, one of whom Doorjdhun sat on the throne. His cousins, the five sons of Pandow, having received from him the city of Agra for their subsistence, they proceeded to that place accordingly. Their names were as follows, 1 Joodeshtur; 2 Bheemaya; 3 Urjoon; 4 Suhdew; 5 Neekool.

They were also called Pandows collectively, after the name of their father; or rather being five in number, and possessing superior powers, they were designated *Panch-dew*, a term which was afterwards corrupted into Pandow.†

Raja Doorjdhun, remarking the supernatural powers with which the Pandows were gifted, and fearing that they would ultimately wrest the throne from his family, determined upon procuring their banishment, as being the best mode of preserving his kingdom. His maternal uncle Sukoonee, then advised him to challenge the Pandows to a game of *chousur*, and employ him (Sukoonee) to throw the dice for him, whereby he would surely win, as he had the power, derived from the blessing of a Rooshee, to throw any number he chose. The Pandows being sent for in pursuance of this advice, they accepted the challenge on condition that the loser should live in secret exile for the space of twelve years, and one more year in some city to which the penalty of doubling the period of his banishment was attached, in the event of the winner succeeding in apprehending him within that time. Both parties assenting to this stake, Doorjdhun and the eldest of the Pandows, Joodeshtur, played the game, and the former winning it as Sukoonee had predicted, the five brothers withdrew to remain concealed in forests for the period of twelve years, and one year more in some city. The Pandows accordingly passed twelve years in concealment in the deserts, and at the commencement of the thirteenth year, they arrived in the city of Wyrath Nuggur, (or Dholka) where they were afforded a secret asylum in the palace of the Raja, so that the discovery of their retreat must have been a matter of great difficulty.

Jemutmal who had been ordered to discover and apprehend the Pandows by Doorjdhun, happening however to visit Wyrath Nuggur,

\* तप Penance.

† This account differs slightly from the mythological history of the Pandows, &c.

in prosecution of his search, was there killed by the brothers, and the death of Jemutmal coming to the knowledge of Doorjdhun, he made certain that Pandows were those who had destroyed him, as no others could have done it. In consequence Doorjdhun in person soon arrived before Wyrath Nuggur with a large army. Having encamped here he consulted with his friend, Raja Kurrin, the off-spring of the sun, as to the best mode of getting the Pandows within his power. The device suggested by Kurrin was to carry off the cattle of the city which would compel every true Rajpoot within the walls to come out for their recovery, and the Pandows being true Rajpoots, their seizure by this means could be easily effected—but as Doorjdhun's army was composed of Rajpoots, by whom it is considered a disgraceful act to steal cattle, Kurrin added that other people were necessary for that purpose. He therefore made a number of images with the filth of his body, and framed horses of wood, into both which he infused the principle of life, and the men thus created, he called *Kat*, which signifies filth or wood, the materials of which he had used on the occasion.

The *Kat* or *Kattees* thus created having performed the service required of them, the Rajpoots of Wyrath Nuggur, among whom were the Pandows, issued out and gave battle, but as this took place the day after that on which the period of banishment, 13 years, had expired, the discovery of the brothers did not involve the penalty of doubling the period of their exile. The fight being over, the *Kattees* applied to Doorjdhun for the means of subsistence and a place of residence, upon which he gave them Pawardess \* situated between Cutch and Sinde, and directed that they should provide for their maintenance by cultivating the lands thus assigned to them. Having obeyed this order, the tribe in course of time comprised the following branches: 1 Patgur; 2 Manjarria; 3 Pandwa; 4 Hoodoor; 5 Baburya. The history of these branches is not however correctly known.

When the *Kattees* first settled in Pawardess, a Rajpoot named Wala was an inhabitant of it. Sometime afterwards, as the Jam of Bhooj was passing through that district with a large army, which he was carrying against Nuggur Parkur, he ordered Rajpoot Wala and the *Kattees* to accompany the expedition, and they accordingly joined him with eighteen hundred horse. On the return of the army from Parkur, it encamped on the banks of the Runn which it had crossed, where no shade was to be found except that afforded by

\* There is a district in Cutch called "Pawur" or "Pawur Desh"

a single Peeloo \* tree, which Rajpoot Wala and the Kattees accidentally seeing, took possession of. They were however, ordered to give up the tree for the use of the Jam, and on Rajpoot Wala's refusal to do so, on the plea that he never quitted his quarters by compulsion, he and the Kattees were ejected from the place by the Jam's troops, and that prince's tents were pitched there. Wala Rajpoot showed his indignation at this treatment, by sitting in the sun without shade or cover, and he made a secret vow not to touch food or water till he had killed the Jam, or sacrificed his own life in the attempt. The Kattees endeavoured to dissuade him from his purpose, by representing the Jam as the greatest sovereign in the country, but without effect. Wala Rajpoot was not to be shaken from his design, in prosecution of which he, at night, accompanied by a hundred horse, proceeded to the tents of the Jam, and having dismounted at the door entered in alone with his drawn sword, and put that prince and his six brothers to death. After which deed he returned to his own camp, and shortly afterwards hearing noises proceeding from the Jam's troops which denoted their knowledge of the murder of their master, he and the Kattees took to flight, and retired within the fort of Pawur in their own country. They had not however, been allowed to escape with impunity, for the Jam's troops had quickly pursued, and were now besieging the fort in which they had sought refuge.

The deceased Jam's successor soon joined the army from Bhooj and conducted the operations of the siege in person. Wala Rajpoot and the Kattees were at last forced to resort to negotiation for their safety. With this view they deputed two devotees, a Rajgur and Rawul, to accommodate matters with the Jam, and apologize for the fatal event which was the subject of hostilities between them. The Jam assented to their wishes on condition of their giving him the daughter of a Kattee in marriage. This was complied with, and the Jam was invited to enter the fort and take up his abode there with an escort of about two hundred horse, after dismissing his army. On this request being acceded to, and after the return of the force to Bhooj, the Jam was lodged with four or five of his attendants in a respectable place within the fort, and the remainder of his followers distributed in parties of five each in different quarters of the town, on pretence that their lodging in one place together would interfere with the preparations for an entertainment which had been set on foot. The Jam and his people were feasted and most hospitably

treated for the space of ten days, during which Rajpoot Wala and the Kattees had matured a conspiracy for their destruction. Finding at the expiration of the tenth day, that the Jam and his party were lulled into confidence and insecurity, they determined to put them to death next morning. The signal agreed upon for the general massacre was the sound of a drum at a fixed hour. Accordingly the Jam with his followers were put to death next morning, in different parts of the city. One man alone was allowed to escape with his life, for the purpose of carrying intelligence of the fate of his companions, and him they deprived of his nose, ears, and tongue. Before he could have reached Bhooj, however, Rajpoot Wala and his companions had decamped to Thana Kundola, where they were soon followed by the new sovereign of Cutch, who had been called to the throne from the obscurity of a village, as soon as the fate of his predecessor was known. On the approach of the Jam's army as far as Wandya and Mallia, Wala Rajpoot and the Kattees became greatly alarmed, and despaired of their lives, and in their extremity they supplicated the interposition of their god, the sun. Wala Rajpoot falling asleep whilst in earnest and deep meditation on his fate and that of his companions, was favored with a vision in which he was directed by his household god the sun, to seek next morning either in a room or under a certain milk bush for two *ludoos* \* and a chaplet of flowers, which, if he found on the spot, indicated he should be confident of victory in the contest which he apprehended. The dream was realized in the morning, but Wala Rajpoot's companions to whom he had communicated the circumstance proving incredulous, he proposed that they should remain there another night when he assured them their god would no doubt manifest his favor towards them again. Accordingly, that night not only Wala Rajpoot, but the whole of his friends were honored in their dreams by a visit from the sun, who directed them to seek in a certain place for a golden lance, which they should regard as a certain token of victory, and of the personal aid of the Sooruj Dewtah in the approaching battle. Finding this vision verified in the morning, Wala Rajpoot and his companions, confident of success, prepared themselves with one accord to fight to the very last. In the morning they took up their position in the battle field, and awaited the onset of the Jam. The near approach of that Prince's army was announced by the sound of the kettledrums, and in a few minutes the enemy appeared marching towards them. The Sooruj Dewtah was now seen with a

\* Sweetmeats.



golden lance in hand and mounted on a grey charger. The god placed himself at the head of the Kattees, and led them on to the charge. The Jam's army was overthrown and totally defeated, and an immense booty of elephants, horses, &c., remained with the conquerors. The Jam himself retreated hastily to Bhooj.

The Kattees with Wala Rajpoot returned to Thana Kundola, and there erected a temple in honor of their god the sun, which still exists.\* From the settlement of the Kattees that part of the country is called Katteewar.

After the above events, Rajpoot Wala or Wala Vooch, who was commonly called Putgooroo, married Roopdeh the daughter of a Kattee. By her he had three sons, viz. Wala, Khacher, and Khooman, who with their father, are the progenitors of seventy-two tribes of the Kattee race. The descendants of Putgooroo are distinguished by the appellation of Awrutiya, and those of his three sons by Roopdeh are called Sakhaet.

*The Sakhaet tribes are as follows † :—*

1 Khacher Wala	head of the tribe having
2 Khooman Wala	had his hand cut off.
3 Wala Wala	8 Deroceya Wala Mechap
4 Leepa	9 Bogra Bapechap
5 Bhojuk Wala	10 Laloo
6 Gopaluja	11 Mun (from their having pleas
7 Kurpura, so called from the	ed the King.)

\* Captain Jacob visited this temple, and has given me the following account from a Gosaiyn in charge, a Charon and a Kattee. "They attributed the erection of the temple to Lakha Phoolanee, a Rao of Cutch, exceedingly ancient, who conquered the country and built round it an immense city, forty-eight Coss in circumference, its gates being Halwud, Nuyalee, Soodhee and Choteyla! Further, that he was slaughtered by his nephew, on which the Babas succeeded in assuming the sovereignty over that part of the country: That the city was afterwards destroyed, and the temples greatly injured, one altogether thrown down; the idols broken at the Mahomedan invasion about a thousand years ago, and the temple robbed of inscriptions engraved on a stone tablet let into the wall, as also the corner of one of the idols containing the date broken off by some European gentlemen about eight years ago"—The only trace of the inscriptions Captain Jacob could find, were in, to him illegible, Sanscrit characters on the pedestal of the idol, where the date has been fractured as mentioned; and afterwards in the same character on the exterior of the sacristum to the North, scarcely legible from age.

The inscription requires more minute scrutiny; and either Captain Jacob or myself will take an early opportunity of attending to it.

† A census of the different tribes is being prepared for the information of Government and the Honorable the Court of Directors, which I should be glad to furnish when permitted.

- 12 Hoodur  
 13 Jogeeya, originally Khooman, but so called from intermarrying with Jogeas, in memorial of which they still wear cloth of the color of ochre, like the Jogeas.  
 14 Raduriya  
 15 Purdur  
 16 Chandoo  
 17 Chandurd  
 18 Dand, originally Khacher, but so named by a king.  
 19 Manuk Wala  
 20 Ratudka Khacher  
 21 Koondaleyn Khacher  
 22 Vukma Wala  
 23 Waykha Wala  
 24 Chansoor Khooman  
 25 Jhobuliya, originally Khacher, but so called from their residing in a village of that name.

*The Awrutiya tribes are,*

- |  |   |
|--|---|
| 1 Geeda, Vadel's descendants.  | 21 Leekhra  |
| 2 Dhandul, originally Rahtore Barwuttyas, from Jodhpoor.               | 22 Mukwana, (Rajpoots excommunicated from their cast.)*                 |
| 3 Chowra   | 23 Sasur  |
| 4 Khowur, originally Mukwana Rajpoots, excommunicated from their cast. | 24 Koteela  |
| 5 Surowla, a branch of the Dhandul.                                    | 25 Veroo  |
| 6 Besiya Boreecha  | 26 Ball   |
| 7 Vechiya  | 27 Jebuliya   |
| 8 Manguriya  | 28 Malla  |
| 9 Turgowriya, from the Wadel Rajpoots.                                 | 29 Jhanjuriya, incorporated with the Dhanduls.                          |
| 10 Bhewla  | 30 Babhareea  |
| 11 Veyghur   | 31 Tadhana  |
| 12 Khoreecha   | 32 Toriya   |
| 13 Dhakra  | 33 Nata   |
| 14 Sekhwa  | 34 Wauk   |
| 15 Teetoocha, from the Wadel Rajpoots.                                 | 35 Baburiya   |
| 16 Jativurra   | 36 Dangur   |
| 17 Paigura   | 37 Ulloo, originally Choowan Rajpoots, excommunicated from their cast.† |
| 18 Pandwa  | 38 Dhananee incorporated with the Dhanduls,                             |
| 19 Maya  | 39 Rhareriya Ditto  |
| 20 Gooliya   | 40 Vuimuka Ditto  |
|  | 41 Geegoya  |

\* By intermixture with Mahomedans, as the Jhalla tribe of Rajpoots, surnamed "Muthwana" and also the Jaizale.

† Probably on the same account as those above mentioned.

42 Koleeya incorporated with  
the Baburiya.

43 Baburiya

44 Bhamla

45 Kagra

46 Loda

47 Haltee

Thus there are twenty five Suk-  
haet, and forty seven Awrutiya  
tribes.

Rajcote, M<sup>y</sup> 24th. 1838.

IV.—*An account of the City of Balkh and its neighbourhood.*  
*extracted from Persian Authorities.* By James Bird, Es-  
quire.

In the absence of any detailed account of Balkh and its neighbourhood, some information on this interesting region, supplied by the Persian tract, lately transmitted to the Geographical Society by Captain Burnes, cannot be without interest at the present moment. This geographical tract, as stated in the preface, is an extract from the third section of a history of Balkh, by Abdallahbin-Kasim Al-husaini, which was copied from another history, written, in Hej. 676, A. D. 1277, by Aboobiker-bin-Doad, who was the Shaikh-al-Islam, or chief of the Mohammedan religion. Captain Burnes calls it the Jamia-UI-Ansab,\* and states that he procured the work from a *Mullah* of Kabul, who received it from the Wali, or chief of Tash Kurghan, the capital of Khulhum. It contains an account of the several traditions regarding the supposed founders of the city of Balkh; the first Mohammedan conquests, and subsequent state of the country; the great idol temple of Balkh, called Naobahar; its mosques, tombs, gates, and changes of its buildings, with notices of the river of Balkh and its distribution to the several villages; the trade of the city, and the mines and passes in the neighbourhood. The style and arrangement of the work\*being faulty, and ill adapted to the taste of European readers, I have endeavoured to arrange the information it contains under the following heads.

GENERAL OUTLINE AND ASPECT OF THE COUNTRY ABOUT BALKH.

*Rivers.* It is here stated, that the water of Balkh comes from Aolang, and that the rivers of Balkh having passed from hence, flow

\* Mr. Wolff, at page 229 of his travels, mentions the Majmao-al-Ansab, or collection of genealogies, which is no where alluded to by name in the present work, though the Majmao-al-gharaib, or collection of wonders is frequently quoted. It was written in the time of Jani Beg of Sind.

by Andarab and Halahjird in five streams,\* which descending from the vallies above into the lower country, continue their course from south to north towards Balkh. In the opinion of Mohammedan writers and physicians, the water of the Balkh-Ab, or proper river of Balkh, is accounted a sovereign remedy for insuring long life, because it flows from the south towards the Pole; and its length is said to be fifty pharsang, or about one hundred and fifty miles, which appears to be nearly the breadth of the valley, as we learn from other sources.†

This river, immediately after having issued from the Darah, or valley where it rises, is distributed into eighteen streams.‡ The division of the river of Balkh into these eighteen canals takes place in the following order. Above the bridge of Adam Bikri, usually called the bridge of Ilchi Khabaja, six of these take their origin, and are known by the names of the Nahr Shahi, Kadr, Siyahjird Balkh § Dastagird, and Chintak. Lower down than the above bridge, the dam, or reservoir of the Nahr Mushtak, Isfahan, Abdullah and Bakhshawar, is situated; and the reservoir of the Nahr Arghandab, Faizabad, and Aliabad, is still lower down, but above the reservoir of Sokhta.

The five remaining canals are those of Adina Musjid, the Karajah, the Yurlang, Faot, and Shaikh Sharik, which have their origin at the village of Sar Panchah. Other streams besides these go to the tract of country about Akhchu. It is also stated, that the Nahr Shahi, Kadr, Siyahjird, Balkh and Mushtak flow on the eastward, and environs of the city, and that the other canals pass to the westward, being distributed to two hundred and twenty-eight villages in the following order:

\* These are the five rivers, which, in the opinion of Arabian geographers, compose the Oxus, and are delineated in their maps as joining this mighty stream; but the river of Balkh is not considered one. The upper district of the Purwaa valley, according to Dr. Lord's late report, is called Ulung, and the mountain pass over it Sir Ulung. Ibn Haukal says, that Halawird is a town in the hilly part of the country of Balkh.

† Mr. Elphinstone states, that the province of Balkh is from a hundred to a hundred and twenty miles in breadth, (from north to south), and two hundred and fifty miles in length (from east to west); but Mr. Bentinck in his notes on Abuighazi Khan's history of the Tartars, says, that it is three hundred and sixty miles long, inclusive, as appears of the province of Khutl, between the rivers of Wakhsh and Badakhshan, not considered as part of Balkh by the former authority.

‡ Both Captain Burnes and Munshi Mohun Lal, mention in their works that the stream of the Balkh river is divided into eighteen canals, of which twelve are still open, according to the authority of Mir Izzat Allah in his travels beyond the Himalaya.

§ Dr. Lord, in his late report, speaking of the pass of Ghorband, says, "but on reaching Siyagird, the hitherto uniform tints of the mountain were seen to be variegated with red, green, ashen grey, which on examination we found to be produced by red ochre, indurated decaying green stone, and strata of volcanic ashes.

Nahr Shahi to villages . . . . .	10	Nahr Bakhshawar to villages . . . . .	10
Kadr . . . . Ditto . . . . .	17	Arghandab . . Ditto . . . . .	16
Siyajird . . . Ditto . . . . .	17	Adina Musjid Ditto . . . . .	13
Balkh . . . . Ditto . . . . .	21	Karajah . . . . Ditto . . . . .	8
Dastajird . . Ditto . . . . .	10	Yurlang . . . . Ditto . . . . .	5
Chimtak . . . Ditto . . . . .	12	Faot . . . . . Ditto . . . . .	17
Mushtak . . . Ditto . . . . .	5	Shaikh Sharik Ditto . . . . .	10
Isfahan . . . Ditto . . . . .	10	Faizabad . . . Ditto . . . . .	13
Abdullah . . Ditto . . . . .	26	Aliabad . . . . Ditto . . . . .	8

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Besides these, eighteen villages are watered by a streamlet in the valley of Kheibar, and there are several others in the district of Akh-chu. Our author states, that the Yurlang irrigates the lands of Salburan, and that the Faot is distributed to Minglik, places mentioned in Captain Burnes's map.

*Mountains and Vallies.* The country of Balkh, which is extremely fertile, presents a succession of hilly vallies, on the south and east, opening into level plains towards the mouths of their different rivers. According to Persian authorities, the city is situated on level ground at a distance of four pharsang, or twelve miles, from the mountains, and twelve pharsang, or thirty-six miles, from the Oxus; but Captain Burnes states it is only six miles from the hills. On the south it is bounded by the high mountains of Hindûkûsh, over which rough and difficult passes lead into India; on the north it has the river Jihun or Oxus; and is situated between Badakhshân and the desert of Khwârizm on the east and west. Only two passes are mentioned by our author, the first leading into India, and the other into Turkistan, but no particulars of the route to either are given. The most common route into Turkistan leads along the Oxus by Khullum, Taikan, or Talikhan; and the ones into India, which were formerly most frequented, are the passes by Bamian, or Ak-robot, and Panjhir. Both are delineated in the accompanying Arabic map, taken from the geographical work named Masalik-wa Mumalik. The former, which lies furthest to the N. W. conducted the traveller by Madir and Kah, to Bamian\* a distance of ten stages; and the other, a distance of twelve stages, led by Khullum, Seminjan, Anderab, and Jarianah to Panjhir.

From late information, we learn that the general line of the Hindûkûsh mountains, on the north side, runs east and west, and at

\* Captain Burnes and Munshi Mokun Lal took nine days to travel from Bamian to Balkh by the pass of Dindani Shikan, and the estimated distance in the Journal of the latter is given in detail, amounting to one hundred and ninety miles.

right angles to the direction of the streams that join the Oxus, and this elevated table land is cut into numerous vallies, the longitudinal axis of which is in the same direction.

#### NATURAL GEOGRAPHY.

The information given under this head by the author, is very scanty, and is confined to a notice of its mineral productions, which are said to be gold and silver,\* obtained from mines in the hills, and the streams of the country. Copper, lead, alum, salt and sulphur, with the ruby of Badakhshan are mentioned as the produce of these hills.

#### HISTORICAL GEOGRAPHY.

The country of Balkh, under the designation of Bactria, has been celebrated, in the East from the remotest antiquity, and is now known to the orientals by the appellation of Om-al-Balad, or the mother of cities. It has, in their veneration, the second if not an equal place with Mekka, which they name Om-al-Kora, or the mother of towns. Numerous are the different Mohammedan traditions, regarding the origin of Balkh, and the names of its supposed founders. Adam, Cain, and Aiyub, or Job, are severally named as the builders of the city, the foundation of which however, is, with more truth, assigned by others, to Kaumars, first of the Peshdadian dynasty of Persia, or to Gushtasp of the Kaianian family, and the same as the Hystaspes of the Greeks.

In the small historical work, called *Malik Shahi*, it is related that Balkh was built by the Tubban, or kings of Arabia Felix, who were of the idolatrous tribe of Aad; and this tradition agrees with what Diodorus Siculus relates regarding the expedition of Osymandias from Egypt into Bactria.

Amidst these contradictory accounts our author, in order to reconcile them, adopts the opinion of Mutawakkil-bin-Hamran, that Balkh was twenty-three times destroyed and twenty-two times rebuilt; and that therefore the several traditions relative to its founders may be correct.

Prior to the commencement of profane history, and the age of Herodotus, it had become a place of great celebrity in the East, and being the most eastern province of the Persian Empire,

\* In Dr. Lord's report to which frequent reference has been made, it is said, "that in the micaslale, immediately over the entrance of the Ghorband pass, and on the very summit of the hill, occurs a vein of silver ore, which however appeared to me so poor, that it would scarce pay the expense of working. I heard of a much richer vein in the pass of Panj-hir, which was said to have been worked to a great extent in the time of the Choghtais."

appears to have obtained the name of Bactria, derived as the ~~word~~ from the Persian word Bahktar,\* signifying the East. Among the Mohammedans it is usually called Balkh Bami, which may be translated the terraced Balkh; and was probably applied to designate the nature of the mountains of Hindûkûsh, or Caucasus; which, in a succession of hilly ranges, on the North side, descend from an elevation of nine or ten thousand feet to the plain of the Oxus. In the middle of the sixth century before Christ the Bactrians, after having boldly opposed the Persian army under Cyrus, or Kaikhosrao, who had returned from the conquest of Lydia, voluntarily surrendered their country to his power. Soon after, and not long prior to the time when Cyrus was slain, in the war against the Massagetæ, his younger son Tanyoxarces, the Smerdes of Herodotus, was constituted Governor of the province; but, he having been secretly murdered by order of his brother Cambysis, the country was next ruled by one of the Magi who had been substituted in his stead. The last is the Smerdes of other classical authorities, and is thought by some to be the same as Loherasp, from the corruption of whose name Hyde thinks, Bactria derived its appellation of Zamaspa.

During the reign of Darius Hystaspes, Bactria, which formed the twelfth satrapy of the Persian empire, was a place of banishment for captives. The ancient Bactrians, who appear not to have differed much in manners from the Scythians, most resembled the Medes in the covering of their heads, and were indeed a branch of this Persian stock, mixed with Greeks and other foreigners. † The Asii, who, with the Tochari, Pasiani, and Sacarauli, overturned the subsequent Greek kingdom of Bactria, about one hundred and twenty-five years before Christ, are esteemed by philologists to be the same people as the Ossetes, ‡ inhabiting the Caucasian

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† Professor Rask, in his remarks on the Zend language, says that its grammatical structure, and system of inflexions correspond not only with the Sanscrit, but in some instances approach nearer to the Phrygian class of languages, (that is to say, Greek and Latin, with their different dialects); in others it is quite peculiar, which seems to show that it is a different language, to be arranged between the Sanscrit and Greek. R. A. S. Transactions. Vol. III. page 531.

Captain Bunn, in a late account of the Shah-pesh Kaffirs, transmitted to the Governor General, states, that in the eight villages of the Nijrow valley, situated in the Kohistan of Kabul, and East of Panjgur, the Pashi language is spoken by the people, and bears an evident affinity to the language of the Kaffirs, who claim for themselves a Grecian descent. The eight village's name, are, 1 Eshpein; 2 Eshkein; 3 Sondur; 4 Ahisy; 5 Ghya; 6 Dorianama; 7 Durai Potta; and 8 Mulakeer; the inhabitants of which are the remains of the Pasiani, who assisted in the overthrow of the Greek kingdom of Bactria.

‡ Throughout the article, quoted in the previous note, Professor Rask maintains that

mountains on the Black sea ; and the connexion of their language with Persian appears to establish their family descent. In ancient times the Medes were named Aarii, and appear to have extended the appellation of Aria to the whole tract between Assyria and India; and even at this day the Ossetes, descended from the Alanni, a branch of the Asii, are known by the name of Ariani . Their ancestors the Asii, who may have obtained their name from the Sanscrit *Asa*, signifying a bow with which they were armed, are according to Abel Remusat mentioned by the Chinese historians as inhabitants of the country of Wan or Sogdiana. From these facts we conclude that the language of ancient Balkh was the Zend; though our author, in the geographical tract which is the subject of this article, tells us that the Deri, the courtly dialect of the ancient Persian language, was that which was vernacular in the country : and adds, on the authority of the *Ajaib-ul Maklukat*, that all the inhabitants were idolaters, until the period of the Mohammedan conquest, under the Khalif Osman. If our author means that Deri was the vernacular language of Balkh, when this conquest took place, the information is probably correct, as Beharam-gaur, fourteenth of the Sassanian kings, superseded the Pehlvi dialect, by the use of the more polished one called Deri, which appears to have been the dialect of the province of Fars or Persia proper. This change was effected in the end of the fourth century of our æra, and it is scarcely credible that this language could have been vernacular in Balkh, though it may have been employed in epistolary correspondence and in business. The inscriptions on the numerous Bactrian coins, found in the country about Kabul, and so well illustrated by the ingenuity of Mr. James Prinsep and Mr. Masson, prove, that from before Christ 195, and in the reign of Menander, fifth of the Greek Bactrian kings, who possessed the country after the death of Alexander the Great, a language following the Zend inflexions, and containing words from the Pehlvi, or Arabic stock, was in common use. The character also, in which it was written, was the Bactrian form of Pehlvi.

The Asii, with the appellation of Sacæ added, were the same people as the Assaceni, whose metropolis was Massaga, and which

Zend is the language of ancient Media ; and says that, in addition to the proof of this afforded by the cunieform inscriptions of Persepolis being in Zend, another circumstance which may be adduced is the dialect of an Iranian tribe, called by the Georgians *Osi*, by the Russians *Ositinzi*, living on the very summit of Caucasus, at present without any particular religion, and supposed, by Mr. Klaproth, (in his journey into the Caucasus and Georgia), from historical probability to be an ancient Median colony.



appears to have been situated between the Cophenes, or river of Kabul, and the Guræus, or river of Kushgar. They were, according to the Chinese historians, addicted to commerce; education was much attended to among them, and it is a curious fact that the name of Massagada Raja, is found on coin No. 19 of the collection published, by H. H. Wilson, Esquire, in the 17th Vol. of the Asiatic Researches of Calcutta. It is a well executed piece of money, and the inscription around the head of the prince is in the ancient or Lath character of Sanscrit. The intimate connexion, therefore, which philologists have observed between the Zend and Sanscrit languages, and the connexion of the former, in many of its radical words, with pure Persian, may be explained without the supposition adopted by English orientalists, that the Zend was forged and borrowed from the Sanscrit.

After the overthrow of the Greek kingdom of Bactria, by the Asii and Tochari, little is known of the state of the country, under the Parthian kings; the first of whom Arsaces, who rose into power about the period when the Greek Bactrian kingdom commenced, is said by Armenian historians to have claimed descent from Abraham by Keturah, and to have established his power in the city of Bahl (Balkh), in the land of Cassai, \* the same as the Cossea of Diodorus Siculus. Cossea or the Caucasus appears to have obtained its name from the tribe of Khasas, or Kas, mentioned in the Kerna Parva of the Mahabarat, and also by the Emperor Baber in his memoirs.

The conquest of the country, south of these mountains, is mentioned in Ma-twan-lin's account of the Great Yuc-cho or Indo-Scythians; who appear to have possessed it from B. C. 126 to A. D. 222, when it became subject to the Sassanides. Successive † Scythian tribes of the same family as the Asii, though nominally bearing allegiance to this dynasty of Persian kings, appear to have pushed on their conquests towards India, of which country they were in possession when Cosmas Indicopleustes visited it in the middle of the sixth century of our era. They are mentioned by him under the name of Hunni; are known to classical writers as the Euthalites; are called by Arabic authors Hayatelahs; and, by the Hindus, Hailhayas.

Ardashir, the son of Babak and first of the Sassanides, having de-throned Ardevan, or Artabanus, fourth of this name among the

\* See Avdall's history of Armenia. (Vol. 1st p. 57).

† See Chinese account of India in Prinsep's journal for January 1837.

Parthian kings, renewed with great splendour the ceremonies and ritual of the Magian religion, and took possession of Bactria, with other dependencies of the empire. According to the history of Nikbi-bin-Massaüd, written in the middle of the thirteenth century, the temple of Istakhar had been constructed by order of Gushtasp, who built there a *dukhma* in which the Zend books were placed with great honors. As the religion of the Persians, and the books of Zoroaster, during the time of Alexander and the subsequent Parthian kings, had been corrupted and lost, the *Zend-Avesta*, some think, was compiled from the recitation of the aged *Mobids*; and soon after the commencement of the reign of Ardashir Babegan, the magnificent idol temple of Balkh, called Naobahar, to which the people of India and China made pilgrimages, was, on the authority of our present author, built, and dedicated to the rites of this religion; which, on the side of India at least, seems to have partaken of the superstitious practices of the Hindus.

Beyond a few detached notices, there is nothing authentic known regarding the state of the country under the Sassanides; but, in the quarrels of Hormuz and Firoz, the sons of Beharam-gaur, the *Hayatalahs* or *Eulhalites*, seem to have played a conspicuous part, and to have extended themselves to India; where, in the middle of the fifth century, they appear to have been in possession of Valabhipur in Kattywar. Haytal, their original country, comprised Balkh, Tocharistan, Bamian, Baklan, Badakshan, Andekhud and Shubergban.

The fate of the Persian empire was irrevocably sealed by the defeat of Yezdijird, in the battle of Nihawand, A. D. 642; and though this unfortunate prince, the last of the Sassanides, sought and obtained assistance from the Khakan of the Turks, he waged an unsuccessful war against the Mohammedan general Ehnif, who, by direction of Omar, had invaded the province of Khorasan. Dominion had passed from the race of Sasan, and Balkh became the possession of their Mohammedan adversaries. The account of these changes is given here from the tract presented by Captain Burnes.

“Historians relate that Ehnif the son of Keis, was the first among the followers of Islam, who in time of Omar, passed the river Jihun (Oxus) and conquered Balkh; but some say, that it was first subdued by Said, the son of Osman. Abdalmalik-bani-Omar, indeed says, “I am of those who first conquered Balkh, and was in the army of Said, who in the time of Moavia, led the men who took the country, and induced the inhabitants to receive the true faith.” It is also related of Laïs, the son of Said, the Egyptian, that, in the year of Hej. 90, A. D. 709, the conquest of Bokhara was effected through him, and that, in the time of Abdalmalik, the son of Merwan, the subjection of Balkh

followed. Subsequently, during the government of Hijaj, Katiba the son of Muslim, marched to Balkh; and when, in the year of Hej. 87, he arrived at the town of Tiluihan, he urged the inhabitants to embrace the true faith, but they replied, that the advanced guard of Tarah Khan, the Wali of Balkh, would not become the followers of Islam, neither would they. He afterwards bribed them by money, and attacked the guard which was defeated and fled to Babardairah, where there was a summer palace, surrounded by water in which the men fortified themselves. At that time Atai-bin-Saib, who was the fourth Shaikh in Balkh, and whose name is connected with the hill of Ataboi, was present with the army, and said to Katiba, "This impudent *Gabr* places reliance on the summer house, and wherefore should we not confide in the great God? Having said so, he whipped his horse, and made him plunge into the water which he passed in safety; and having made his way to the summer house, he threw down its doors. When the men of the guard perceived this they took to flight; but being pursued and taken, they were brought before Katiba and consented to profess the faith of Islam. Succeeding these events Katiba marched for Bokhara, where arriving in the cold season, and hearing that the converts had relapsed into their former idolatry, he again led his troops to Balkh, by way of Cheghnam; which place had submitted to the arms of Katiba, and of which Muttawakkil, the son of Hamran, and seventh Shaikh of Balkh, was made governor. As the people of Turmiz had at this time accepted the true faith, Katiba asked their assistance in taking possession of Balkh and punishing those who had rebelled; and agreeably to his request they accompanied him across the Jihun, and made prisoners the apostates, who were again brought back to Islamism. Not long after, however, they relapsed, and went by way of *Khullum*, and *Semnan*, to *Isknish*, where there was a fort which he destroyed; and having made prisoners of the garrison, distributed the booty that was captured among his troops.

The whole of this part of Khorasan as far as the Oxus, was ruled by a Persian satrap, named Mahuiah, who fixed the seat of government at Merv; and the country northward of the Oxus was subject to the Khakan of the Turks. Balkh and the neighbouring countries subsequently became the possession of the several Mohammedan dynasties, known by the name of Soffarides, Samanides, and Ghaznavides, until in A. D. 1221, it was subdued by the Moghul armies of Jenghiz Khan. Balkh was at this time called the capital of the true faith, and was of such extent, as to contain within the town, and neighbouring villages, twelve hundred places of Mohammedan worship, and many public baths.

As the power of the descendants of Jenghiz Khan declined, that of Taimur rose into notice, and Balkh became the possession of his family; the members of which ruled it with various degrees of power, until the time of Aurangzeb. Since then it has been alternately in possession of the Persians and Ouzbek Turkomans.

## LOCAL GEOGRAPHY.

Balkh, which is now a heap of ruins, exhibits the remains of a few colleges, mosques, and a dilapidated mud wall, to attest the existence of its former greatness. Within the wide circuit of the latter, only a small portion is inhabited; and the account of its former buildings we shall here translate entire from the Persian of our author.

*Naobahar.* "When the fortunes of the family of Barmek, in the time of Harun-ar Rashid, had been scattered through the kingdoms of the world, one of this race named Fazil bin Yahya was, in H. 176. A. D. 792, made governor of Khorasan; and when at this time he came to Balkh, having assembled the learned and men of consequence in the country, at the gate of Naobahar, he said to them, "Know and be aware, that originally the race of Barmek sprang from Chapa Khan of Balkh, and my great grand-father, Barmek, who was, as well known, of the family of the Sassanides,\* was the person who built the Naobahar of Balkh." This temple was the Kaabah of the fire worshippers and their place of adoration. In the *Majma-ul-Ghorrah* it is related, that the family of Barmek, erected in Balkh, one of the most wonderful structures in the world, to which the people from Hindustan, Chin, and Machin, kings and princes, high and low, from all parts, made pilgrimages; and, as is the custom at the Kaabah, having gone round the building several times, they made large presents there. It is also related that it was an idol temple, which in the time of the Khalif Osman was destroyed."

The name, Naobahar, means the new spring time; and the existence of idols in this temple would indicate that in eastern Persia, an amalgamation of the Magian and Buddhaist, or Brahminical, systems of idolatry had taken place during the reign of the Sassanides. The temple at Multan, called the golden house, and described by Ibn Haukal, would appear to have been constructed on the same principle as the Naobahar of Balkh. It contained an idol, made in the form of a man, to reverence which the people of Sind and Hind made yearly pilgrimages, and those who prayed at the temple, brought with them great riches which they paid in tribute. The idol was seated

\* This account is confirmed by the *Tarikh Guzidah*, quoted in Price's *Mohammedan history*, which says. "The last circumstance which we are here induced to notice, is the elevation to the Vizzaurut, or office of first minister of state, of Jauffer Barmekky, the Barmecide, which is stated to have taken place under Suliman. Of this illustrious family, it is now discovered that, the ancestors had filled some of the most important stations under the Persian monarchy as far back as the reign of Ardesheir Baubegan. In them also had been vested from distant periods, the hereditary superintendence of the Pyrae or temples of fire, of the Magian superstition."

on a square throne, was crowned with a diadem of gold, and the hands rested on the knees, as usually observed in the images of Buddha. \* This temple was destroyed by the lieutenant of Hijaj-bin-Eusuf who invaded Sind during the Khalifat of Walid.

The geographical treatise of Bakoui, written in the 15th century, describing Balkh, says, that this is a great town, and one of the principal ones of Khorasan, built by Manucheher, the son of Iraj, the son of Feridun ; and its inhabitants are known for their vanity. Here was the Naobahar, a vast temple of idols, which was a hundred *guz* long by as many in breadth, and more than a hundred in height. It was under the charge of Barmek ; and the kings of India and China came to worship the idol, and to kiss at the same time, the hand of Barmek. This Barmek ruled in all the country, and one succeeded the other, until the time when Khorasan was taken by the Khalif Osman. The temple was subsequently destroyed by Kais the son of Haitham.

*Gates and Bazaars.* Our author tells us that the Asmanians, according to Abu Ishak, called the city of Balkh, the city of blood, because in his time it had been more than twenty times destroyed during the religious crusades which had been undertaken against it.

"This city had four doors, one on the east, one on the west, and two others on the north, and south ; and by whatever door you entered, there was a bazar filled with all manner of delicious meats, towards each of which ran all the streets of the city. The western gate was called the gate of Yahyah ; the southern that of Naobahar ; the eastern the gate of Hinduwan, and the fourth had no name.

"The *Majma-ul-Gharair*, which was compiled in the time of Abdullah Khan, son of Sekunder Khan, the son of Jani Beg, says, regarding Balkh,

\* Mr. Prinsep has satisfactorily established the transition of the Mithraic, or Indo-Scythian coins, to the Hindu or Kanaoj series ; and has shown that the Indo Sassanian type of coins, indicates that the religion of Bactria was corrupted by the admixture of Buddhism, or Hinduism, as has been just asserted on Mohammedan authority. In his journal, for April 1837, "we now arrive," says he "at a class of coins of considerable interest, as well to the history of India, as to the science of numismatics ; for the gradual manner in which the nature of their device has been developed, is as much a matter of curiosity, as the unexpected conclusion to which they lead respecting the immediate prevalence of the same Sassanian (or ignicolist) rule in Upper India, while the foregoing coins only prove the mixture of Hinduism with the religion of Bactria." The Mithraic admixture of Buddhism, which seems to have prevailed sometime after the era of the Sassanides, is also denoted by the lambent flame observed on the image of Buddha, found at Kabul, near the village of *Beni-hissar*, and depicted in his journal for September 1834. We also find that flame is depicted on the shoulders of the figures on those coins bearing the Zend word *Athra*, signifying the igneous essence of the sun ; and we observe it on one of the Dahgops at Ajanta, in a niche of which there is a standing figure of Buddha.

that the fort which is now inhabited and full of people is known as the fort of Hinduwan, which Abu Muslim Maraazi first peopled ; and it appears that the author, when speaking of the fort of Hinduwan, alludes to that which is within the city, for afterwards he tells us, that in Hej. 765, Amir Husain Gurkan having repaired its buildings, the inhabitants took possession of that which was the old citadel. Afterwards when Amir Taimur, in Hej. 770, besieged the city, he put Amir Husain to death and destroyed the old fortress, removing at the same time the inhabitants to a new one. It is also said, that in Hej. 945, A. D. 1538, Kaitan Karah, Sultan of the Usbeks, built another fortress, in the neighbourhood of that of Hinduwan, which the people call Shir Haji, and may be that part of the wall within the city, which fortified with bastions is still visible, and which in the time of Firdaos Makani, (Akbar) was in good repair, but is now in ruins."

**Mosques.** Besides these buildings, there are twenty-nine mosques which are yet frequented ; and of this number there are three small ones, viz. the Khankah of Hazrat Mulvi Rum, at the gate of Khaoja Akashah, of which the stone Mehrab is still in existence ; the Khankah of Hazrat Mir Kalil, which is on the right of the road to the gate of Shutir Khwar ; and thirdly the Khankah of Hazrat Sofi Khaoja. Most of them are Friday Mosques : and the remains of other buildings still visible are two colleges, four baths, and one stone reservoir.

Our author in addition to the above information regarding Balkh, gives a detailed account of the tombs of Mohammedan saints and men of note ; but as such would be of little interest to the European reader, we must here, in conclusion, express our obligation to Captain Burnes for what he has enabled us to supply.

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#### MEETINGS OF THE SOCIETY.

*June, 21st.* At an extraordinary meeting, held in the Society's room Town hall. Rear Admiral Sir Charles Malcolm, President, in the Chair.

Reverend George Pigott ; Captain W. C. Harris ; Dr. R. H. Kennedy ; Lieutenant Robertson ; Joseph Glen, Esq. ; Colonel J. G. Griffiths, were elected members.

*Read a Letter* from the Secretary to Government, presenting A Report on the River Indus.\* By A. C. Gordon, Esq., Assistant Surgeon on Deputation, &c. to Bombay.

*A Letter* from Mr. Willoughby, presenting A Report on the Traffic in Slaves carried on at Massowah. By A. W. Nott, Esq., Acting Commander. I. N.

\* Printed in the present number.

*August, 2d.* Rear Admiral Sir Charles Malcolm, president, in the Chair.

Lieutenant J. G. Forbes; Captain R. Oliver, R. N.; G. Giberne, Esq.; Dr. C. Morehead, were elected members.

*Read a Letter* from the Secretary to Government, presenting on the part of Government, a printed copy of a Report, by Dr. P. B. Lord, of a visit to the plain of Koh i Damun, the mining district of Ghorbund, and the pass of Hindú Kúsh; with a few general observations respecting the structure and conformation of the country from the Indus to Cabul.

*A Letter* from Acting Chief Secretary to Government, presenting *A Report* on the Hill Fort of Pawaghur, drawn up by Assistant Surgeon F. S. Arnott.

*Read a Letter* from Captain A. Burnes, addressed to the Secretary, giving the following summary of the principal geographical labors of his Mission to Cabul.

*Peshawer, May 26, 1838.*

"You ask me to give you an account of our proceedings: I wish I had time; but here is a sketch, in which modesty need not hold my pen, as I have only acted as doorkeeper, sending forth the officers committed to me in every direction.

"We left Bombay in the end of 1836, and were engaged on the Indus till July 1837. Lieutenant Wood of course, undertook the examination and survey of the river as his province, Lieutenant Leech, the land on either side, and Dr. Lord collected and delineated the fishes and animals, and has sent a most interesting memoir on the plain of the Indus, which contains many more particulars than its title \* indicates. For myself I did what I could to improve our knowledge of the commerce and political state of these countries, but I have been a poor contributor to Geography.

"To finish the Indus, we all navigated it to Kala Bagh; here the Mission disembarked, as the river above this place to Attock is not navigable for four months during the swell. Lieutenant Wood, however, ascended to Muckud, twenty-eight miles above Kala Bagh, but the river had risen in some places sixty-five feet. He therefore proceeded to Attock by land, and descended to Kala Bagh.

"At Attock we sent a boat up to Peshawer, and in returning from Cabul to this we all embarked on rafts at Julalabad and descended to Peshawer, so that Lieutenant Wood has actually navigated from within eighty or ninety miles of Cabul to the ocean.

"We set out from Peshawer for Cabul in September last, and passed through the grand defile of Khyber, which Lieutenant Leech has minutely delineated, while Lieutenant Wood has given a map of, and a paper on, the valley of the river of Cabul. In October we all proceeded to Koh i Damun, and Lord and Leech ascended the great pass of Hindú Kúsh to its summit.

"We had not been long at Cabul before the Chief of Kundúz was found to be in want of a Surgeon to cure his brother's eyes, and this same brother

\* Medical memoir on the plain of the Indus.

was preparing to come to Cabul. Dr. Lord, however, agreed to attend him at Kundúz. Lieutenant Wood joined him, taking all his instruments, and they passed into Tartary having encountered a terrific snow storm, in attempting the pass of Saranlung, which drove back the whole party. An Elchee of Dost Mohamed Khan's, who proceeded, was frozen to death, and our party had consequently a narrow escape. Wood and Lord then followed the Bamian road, and reached Kundúz, but by a different route from my former one. That much feared personage Mograd Beg was very kind to them, and Dr. Lord turned his presence to such account, that Lieutenant Wood had permission to go any where. He set out forthwith for the far famed Budukhshan, passed right through it, and traced the Koksah river up to its very source, near the country of the Siahposh Kafirs. This was accomplished in winter: he then turned north, and, glorious trophy of perseverance, soon found himself among the Khirghizzes of Pameer, and standing at the source of the Oxus, which issues from a lake in Pameer at an elevation nearly as great as that of Mont Blanc! From this he came back by Wakhán to Kundúz, and then examined the lower Oxus to near the Longitude of Kundúz. Dr. Lord all this time was conciliating the Meer of Kundúz. When the time for returning arrived, they effected this by the Punjshcer pass of Hindú Kúsh under the protection of a holy man, and by an entirely new route; so that these mountains have been crossed and recrossed.

"A month after these Officers set out for Túrkiстан, an opportunity occurred for sending Lieutenant Leech to Kandahar. He remained there till this month, and is to travel by the Kojeh Amran mountains, and the defile of Bolan, to Shikarpoor.

"At Cabul I looked around me, but a stationary man cannot contribute much to geography. I have, however, written supplementary papers to all my former ones.

"We left Cabul in the end of April, and the last of our party reached this ten days ago.

"Lieutenant Wood and all of us entertain a very high opinion of Macartney's labours. His complete memoir was never published, as Mr. Elphinstone states at the end of his book: get it applied for, and publish it in justice to Macartney and for the benefit of us all.

"Lieutenant Wood states that he has been very much struck with the correctness of Marco Polo; and Wood is the first who has trodden on the steps of the ill-used Venetian."

*Read a Letter* from Dr. Frederick Forbes, dated Bussorah, 3rd June, 1837, forwarding a paper entitled "Some account of the Western portion of Márwár, commonly called Mullani.\*"

The Secretary laid before the meeting a "Translation of an account of the Kattees, taken from the mouths of their own Genealogists. By James Erskine Esq.,"



## DONATIONS TO THE LIBRARY.

A Persian work descriptive of the celebrated "Mother of cities," Balkh; presented by Captain A. Burnes.

Noticias Para a Historia e Geografia das Nacoes Ultramarinas, five vols. Memorias Da Academia R. Das Sciencias De Lisboa, two vols. Presented by Le Conseiller De Macedo.

The Trevandrum Almanac for 1838. presented by J. Caldecott, Esq.

Expedition into S. Africa, by Captain W. C. Harris, presented by the Author, through Dr. J. Burnes, K. H.

Rear Admiral Sir Charles Malcolm announced his intention to resign at the present meeting the office of President, in consequence of his approaching departure.

It was then proposed by Dr. Bird, seconded by the Secretary, and carried, that the members of the Committee be requested to hold a meeting, for the purpose of considering the most suitable manner of testifying the Society's sense of Sir Charles Malcolm's services to the Institution, during the period he has presided over it. The proposal of the Committee to be submitted, for adoption to the Society at an extraordinary meeting, to be summoned for that purpose.

*August 13th.* An extraordinary meeting held for the purpose of considering the address to Rear Admiral Sir Charles Malcolm, recommended by the Committee, on the occasion of his resigning the Chair of this Society.

Present. Colonel T. Dickinson, Vice President in the Chair. Captain Daniel Ross; Colonel D. Barr; Captain R. Oliver, R. N.; Captain J. Bonamy; Dr. C. Morehead; R. L. Leckie, Esq., Lieutenant J. G. Forbes; R. Smith, Esq.; A. B. Orlebar, Esq.; H. W. Morris, Esq.; C. McLeod, Esq.; Dr. J. Burnes; J. Bird, Esq.; Lieutenant G. Fulljames; J. Sindry, Esq.; John Graham, Esq.; J. F. Heddle, Esq.; and Dr. J. Glen.

Dr. Bird proceeded to read the address as follows:—

To

Rear Admiral Sir Charles Malcolm,

Late President of the Geographical Society,

Sir,

Bombay.

Having received intimation of your intended departure for England, and consequent resignation of your office as our President, we, the Committee and members of the Geographical Society of Bombay, cannot permit you to quit the shores of India without expressing our obligations for the warm interest you have invariably taken in the success of an Institution, advocated by your distinguished brother, and which, under the auspices of subsequent Governments, and your own zealous and efficient support, has obtained a degree of credit, both here and at home, honorable alike to you, and the members of that service over whom you have presided with such ad-

vantage to this Society. Placed so favorably as are the Civil Service, the Military and Naval Officers of India, to improve and extend the science of geography, it was imperative on us for the credit of our nation, that, with such fields of inquiry as are accessible to us on every side, we should not neglect opportunities of gaining information, or exhibit less activity in research than our countrymen at home. In this path of emulation you have given us such cordial assistance, by so calling forth the energies and valuable contributions of officers in the Indian Navy, and those of your Civil, Military and Commercial acquaintances, as to deserve our warmest thanks and especial regard.

All interested in the advancement of oriental navigation and commerce, must feel grateful that the officers under your command, and by your direction, have honorably distinguished themselves in their surveys of the Persian Gulf, Red Sea, Southern Coast of Arabia, the Maldives, mouths of the Indus, the Chagos Archipelago, with the bank of Saha de Malha, part of the east coast of Africa, and finally the Gulf of Manaar and Palks Bay, not yet completed.

In these undertakings you have amply fulfilled the promise, made in 1831 when you became our President, that you would use your utmost endeavours to secure the success of the Society and promote its objects. But your efforts to support us have not been confined to the Naval service, as you have never failed to represent the claims of the Society to the patronage of persons holding high situations in this country, and powerful to give us aid. Of these we must mention your successful applications to Lord Clare, to Lord Auckland, and to our own late and respected Patron, Sir Robert Grant, whose interest in this, as in all other useful institutions, was evinced by the numerous and most important benefits which his Government conferred on us.

To mark, therefore, how much the Institution, which has now attained a healthy maturity, owes to your aid, we request you will do us the honor of accepting the situation of our Honorary President, and that, on your arrival in England, you will permit your portrait to be taken, that it may be hung up in the rooms of the Society, as a memorial of our being greatly indebted to you.

With warmest wishes for your future welfare,  
We remain &c. &c. &c.

It was proposed by Colonel Barr, seconded by Colonel Dickinson and unanimously agreed,

1st That the address be adopted, and presented to Sir Charles Malcolm by a deputation consisting of Captain Ross, James Bird, Esq. and the Secretary.

2nd. That a subscription be opened among the members of the Society to defray the expense of Sir Charles Malcolm's portrait.

3rd. That the thanks of the Society are due to James Bird, Esq. for the trouble he has taken in drawing up the address.

It was proposed by Dr. Burnes, seconded by the Secretary, and unanimously agreed,

That Captain Daniel Ross, F. R. S. be elected President of the Society, vice Rear Admiral Sir Charles Malcolm resigned.

Captain Ross having returned thanks and accepted office; the following letter from Captain W. C. Harris, of the Engineers was submitted to the Society, along with a copy of his Expedition into South Africa recently published.

To

Dr. J. Burnes K. H.

Belgaum, August 1st, 1838.

Sir,

I do myself the honor of requesting that you will lay before the Geographical Society of Bombay the accompanying Narrative of my recent expedition into the interior of Southern Africa: I have already had the pleasure of directing a copy of it to be forwarded to the Royal Geographical Society of London.

My journey from the Cape Colony through the territories of the Chief Moselekatse to the Tropic, in 29°. east longitude, and my subsequent return across the head of the Vaal river by an unexplored route, through the scene of that prince's hostilities against the emigrant farmers, to the colony, being distinctly traced on my map, a copy of which, you are aware I had also the honor of forwarding to the Secretary of the Royal Geographical Society, from Cape Town in October last, it would be a needless trespass on the Bombay Society's time were I here to enlarge on the subject; I shall therefore simply state that the map includes a section of Southern Africa, hitherto either imperfectly described or entirely unknown, and was compiled during my expedition from personal observation, and from authentic information afforded by missionaries and intelligent traders, upon whose accuracy I could rely.

I beg, however, particularly to solicit the attention of the Society, to the fact of my having penetrated to a spot which was described as being not more than six weeks or two months journey from that great inland lake the actual existence of which, between the Equator and the Tropic of Capricorn, was first satisfactorily established by Dr. Smith's expedition in 1835; and that every circumstance conspiring to favor the successful continuation of my journey, I was only deterred from making the attempt to reach that remarkable point in the desert, towards which geographical attention has been so long directed, by the fear of exceeding the limits of my furlough from India.

For reasons of his own, which will readily be understood from a perusal of my narrative, it will be seen that Moselekatse was particularly anxious that I should proceed to the northward, instead of returning by the Vaal river; and to that end volunteered me every assistance. My oxen were in the finest condition, and the recent heavy rains having filled the pools in the desert upon which my supply of water must entirely have depended, it was with no common feeling of disappointment and regret that I found myself compelled to retrace my steps at a moment when a prize of such value was apparently within my grasp.

Feeling an irresistible desire to extend my acquaintance with Africa, and still further to assist in filling up the chasm which is yet to be supplied in her Geography, and having already upon my private means, without any previous experience in African travelling, and at a most unfavorable conjuncture, safely accomplished a long and perilous journey among savage tribes, I now venture to make through the Bombay Society an offer of my services to the Royal Geographical Society; and being fully confident that unrestricted by time, with a due regard to the seasons, aided by the knowledge I have already acquired, I should experience little difficulty in penetrating to the Lake in question. I beg to volunteer to make the attempt, and earnestly to solicit the support and recommendation of the Society here, to which I have the honor to belong, in favor of the object which I have in view. Coming from the Royal Geographical Society, there can, I think, be but little doubt, that an application for my services for such a purpose would be met by the Hon'ble the Court of Directors with their accustomed and well known liberality as a public body, and with a spirit not likely to prove injurious to my personal interests.

In conclusion, allow me to say, that I am ready to proceed upon this expedition at any time that permission shall be obtained; but, as it is highly advisable if not indispensable, that a second officer should be of the party; and as there would obviously be little or no prospect of immediately finding at the Cape one combining the inclination and necessary qualifications, I beg to submit that in the event of my offer being favorably received, the Society should recommend permission for a similar purpose to be granted to Lieutenant George Fulljames of this establishment, an officer every way qualified for the undertaking, equally zealous and enthusiastic in the cause with myself—who has volunteered, and is ready to accompany me.

I have, &c. &c.  
(Signed) W. C. HARRIS,  
Captain, Engineers.

Resolved that the letter now read be submitted to the Committee of Management, for their consideration.



# REFERENCES TO THE 'ARABIC MAP OF MAWARA-AN-NAHR.\*

- 1 River of Harriat, or Badakshan
- 2 Ditto of Wakhsh, or Wakhan, to which is joined the river of Yunan called Rum-Malik.
- 3 'Ditto of Farghi, or the Surkha-ab
- 4 Ditto of Andenjaragh, or the river of Hissar.
- 5 Ditto the Wakhshab, or river of Toupalak.
- 6 Rukhshab.
- 7 Anderab.
- 8 Bashalahak.
- 9 Tokhairistan.
- 10 Afra.
- 11 Bamian.
- 12 Kah.
- 13 Madir.
- 14 Balkh.
- 15 Khullum.
- 16 Semijan.
- 17 Taikan, or Talkan.
- 18 Laram.
- 19 The river of Herat.
- 20 Herat.
- 21 Ghaur.
- 22 The mountains of Ghaur.
- 23 The river Hirmand.
- 24 Zarinj, or Drangiana.
- 25 The deserts of Sistan.
- 26 The Sea of Zarrah or the Aria Palus.
- 27 Farah.
- 28 The deserts between Fars and Khorasan, or those of Karma-nia.
- 29 Turmiz.
- 30 Khwarizm, or Chorasnia.
- 31 The Sea of Khwarizm, or the Aral.
- 32 The desert between the country of Khizr, or Mazenderan and the Oxus.
- 33 Nisa.
- 34 Abiward.
- 35 Maihmunah.
- 36 Naishapur.
- 37 Siraks.
- 38 Basan.
- 39 Farab.
- 40 Talikan.
- 41 The confines of Gurkan, or Hyrcania.
- 42 Margan, or Margiana.
- 43 Desert of Khwarizm.
- 44 The river Jihun, or Oxus.
- 45 The confines of India.
- 46 Merv.

\* The names of those places only are given here, which serve to illustrate Dr. Bird's paper; the rest are omitted, as the map will be published complete, with the collection of Arabic maps, belonging to the work *Masalik wa Moomalik*, from which it is taken.



PROCEEDINGS.  
OF THE  
BOMBAY GEOGRAPHICAL SOCIETY.

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NOVEMBER 1838.

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PAPERS, ETC.

I.—*Memoir on the River Euphrates, &c. during the late Expedition of the H. C. Armed Steamer, "Euphrates."* By James W. Winchester, A. M. Assistant Surgeon.

FROM THE MOUTH OF THE RIVER EUPHRATES TO KORNAH.

The river Euphrates, having its origin on the western side of Mount Taurus, is one continued stream till its junction with the Tigris at Kornah. When united, the streams change their appellations, and are denominated the Shat-el-Arab, or the river of the Arabs. At Mahumrah, where the Delta commences, the Shat-el-Arab divides into two branches; the western, navigated at the present day, and known by the name of Cossisa Bony, or Bouna, and the eastern, now not navigable, which is called Deree Bouna, from Deree, an island at its mouth.\*

The bar at the embouchure of the Cossisa Bony, better known under the designation of Shat-el-Arab, or the Bussorah river, is not indicated by any land marks, but by soundings, and the discoloration of the water; nor is it until vessels have crossed the bar, where the soundings vary from two and a quarter to three fathoms water, that the first signs of the banks are observable in a low spit of sand, running out from the right bank; abreast of this, however, both banks become speedily visible, covered with tall reeds, and innumerable pelican. Ten miles above the bar, date trees begin to present themselves, and the breadth of the stream exceeds half a mile, while below, it is never broader than a mile. With the exception of the difficulty in crossing the bar, the stream of the Shat-el-Arab is navigable to vessels of considerable burden, till above the Delta, where,

\* Vincent.



at a place called the "Debbas," two miles above Mahumrah, the channel is so shallowed by several small swampy islands, that ships drawing seventeen feet of water cannot pass through, but at spring tides. But above the "Debbas," the river again affords sufficient water for vessels of six-hundred tons proceeding to Bussorah, or even to Kornah. The average breadth of the river from the Delta to Kornah is six-hundred yards, and the soundings vary from five to nine fathoms. The influence of the tides extends to Kornah, but they cause no evident rise and fall in the river beyond Bussorah.

Both banks are clothed with forests of date trees, "*Phenix Dactylifera*," from near the mouth of the river, and numerous creeks, from fifteen to thirty feet in breadth run inwards, often upwards of a mile, irrigating the bank, which is flat, and divided into numerous compartments by deep trenches, which, as the tide rises, become filled with water, sometimes to overflowing, but always so as to keep the ground moist on which the trees are. The sides of these ditches, which average from four to eight feet in width, are covered with willows, and beneath the date trees, the soil is completely overrun with the liquorice plant, *Glycyrriza Glabra*, the root of which, is only used by the natives, in making a sherbet, notwithstanding it is more than one inch in diameter. Where there are no date trees, the soil is flat and chiefly alluvial, though it assumes in many parts, a sandy appearance. Soon after the fall of the waters, it becomes arid, and barren, whilst during the inundation it is green with innumerable grasses, intermixed with white and red clover—*Trifolium*; a few saline bushes show themselves, the chief of which is the *Salsola Nudiflora*, a species of soda plant, which is not only very common here, but all along the Euphrates and the Tigris, and Roxburgh says, it is capable of producing a very good fossil alkali. If the inhabitants were encouraged, much *Barrilla* both for the preparation of soap and glass, as also for purification, might be obtained, which I do not doubt would find a ready market in most parts of the world.\*

Above the Delta, the banks, especially the right, are thickly studded with gardens, in which are apricot, peach, pomegranate, lime and other trees, along with the vine; these, and the many tombs erected to Arab saints and shaiks, whose domes rise above the date groves, in which these gardens are, add much to the beauty of the wide and majestic stream of the Shat-el-Arab. This appearance of the river continues till above Bussorah some miles, when the gar-

\* At Bagdad this plant is burned for its *barrilla*, with which a green glass is manufactured.

dens cease, and date trees, and extensive swamps, dry in the winter alone, occupy the bank till the river divides at Kornah, below which, the Choaspes unites its clear stream with that of the Shat-el-Arab.

From the bar of the Bussorah river to Kornah, no town of importance save Bussorah occurs. The banks retain, however, the ruins of several smaller towns, the principal of which is Mahumrah, destroyed some time ago by the Pasha of Bagdad, chiefly because it assumed to itself the power of importing and exporting without paying duty to the Pashalik.\* The other villages, for their ruins mark that they cannot properly be designated towns, were ravaged by the late appearance of the plague, since which, they have not recovered their former population, nor have their present inhabitants been able to repair the houses, which appear but as heaps of ruined mud walls. Besides these, among the date groves several Arab villages have lately sprung up, whose inhabitants possess boats of considerable burthen, employed in the exportation of dates. They are thickly populated during the date season—August and September—by numerous hordes of wandering Arabs, who come from the interior either to purchase or be employed in gathering the crop. There are others, who prowl about, for the purpose of stealing from the trees, the dates the villagers are unable to guard.

Bussorah, situated on the right bank of the river, and built among date trees, possesses none of its former importance. It is a fortified town, whose brick walls, fast falling into decay, enclose a much larger space than has ever been occupied by buildings. To extend, however, the enclosure of eastern towns, has always been a practice, prevalent even in ancient times, as it afforded ground sufficient to cultivate the necessaries of life, so that during any protracted siege, the inhabitants did not suffer from famine. Within the extensive walls of Bussorah, considerable cultivation still exists, irrigated by the waters of the Euphrates, and date trees all along the cultivated patches, are thickly planted, which here, as elsewhere, on the banks of the river, yield the greater portion of the food of the lower classes. The plague lately depopulated Bussorah, and since, it has neither increased its commerce, nor obtained any addition to its buildings; on the contrary, the latter have been fast falling into decay, and now more than two thirds of the town is a heap of ruins.

The bazars are still extensive, but do not present such an opulent

\* A very recent attempt was made to revive Mahumrah, to which the Governor of Bussorah was accessory. This treachery, however, having speedily been brought to Ali Pasha's notice, a firman was sent from Bagdad during the perusal of which, its messenger in open durbar shot the Governor.

appearance as those of Bushire. The principal ones are those in which fruit and fish are sold, and these with the others are thickly crowded with coffee and water drinking shops. \* The English intercourse by trading vessels is limited, and the display in the bazar of British manufacture, is less than what is observable in Bushire, or even in Muscat.

The approaches to Bussorah from the river, are by two creeks, defended by bastions at their entrance, whose banks are covered with mimosas, mulberry, jujube, trees, and the wild blackberry. They are navigable upwards of a mile by boats of nearly one hundred candies.

The whole soil around Bussorah is alluvial, occasionally effloresced with salt and nitre, capable with due irrigation of producing any crop, as is the soil within the walls, although it does not receive that attention requisite for the production of an abundance it would otherwise grant.

The population may be roughly estimated at twelve thousand, of whom not more than three or four hundred are Turks; the other inhabitants are Arabs, Persians, and Jews. The trade consists chiefly of the export of dates, salt, and horses, and the import of rice and wood from the Malabar coast. Ships obtain good supplies at Bussorah, and the climate, though sometimes oppressively hot, has been considered very healthy. Plague and cholera have occasionally appeared; but with considerable intervals between each visit.

#### FROM KORNAH TO HILLAH.

At Kornah, one of the supposed sites of the garden of Eden, and one of the three Apameas built by Seleucus, in honour of his first wife Apama, now—although it was formerly a place of some importance—a small village, forty-seven and a half miles from Bussorah, and one hundred and thirty-seven and a half from the bar, the streams of the Tigris and Euphrates unite. Below their junction, the united stream is six hundred yards broad, while either river separately does not exceed three hundred in breadth. The ascent of the river Tigris is in a direction N. W. by N.; that of the Euphrates east and west. The word Kornah, in Arabic signifies a horn, marking the connexion with the Greek, Latin and English synonyme, and the rivers pursue a direction after their division similar to the branching out of a bullock's horns. This junction of the rivers of Mesopotamia, was known to

\* But what most attracts the attention, is the peculiar construction of the bakers' ovens; they are domes open on one side, with the fire in the centre, on whose smooth inner heated sides, the thin cakes of bread are attached while in a moist state by their own adhesiveness, which is sufficient to keep them there till baked.

Ptolemy, who has much more correctly laid down their geography, than either Arrian or Pliny, who have given a separate embouchure to both the Euphrates and Tigris.

Till near Shoog Shookh, a distance of sixty-eight and a half miles from Kornah, the right bank of the Euphrates is swampy, covered with reeds, and, during the rise of the river, inundated; the left is studded very generally with date trees, among which a village now and then appears, though more commonly, only a few leaf huts are seen, surrounded by nothing like cultivation; flocks of cattle being apparently the only means of support the inhabitants possess. \* Both banks of the river are, when the rise is at its height, below the level of the current, and mud dikes along the greater part of the left bank, prevent its being overflowed like the right; occasionally, however, these being destroyed, the country is covered by water with reedy vegetation, among which are a great many pelican, *Pelicanus Onocrotalus*, considered a sacred bird by the inhabitants. Sometimes the river rises above both its banks, so as only to leave them indicated by clusters of small grassy islets, with a few reed huts on them, while the expanse of water extends to the horizon, relieved only by clumps of date trees. This desolate waste continues till a few miles below Shoog Shookh, when the banks again become thickly clustered with date trees, and every reach of the river becomes more beautiful and interesting.

It was then the twilight shades of the lofty palm, the pelican swimming on the smooth clear streams, the huts of the Arabs, and their wild inhabitants, gazing on the steam vessel as she passed upwards, the occasional torrent gushing over the confines of the river, flooding the low land beyond, appearing through the date stems, like a great lake, with the now and then cultivated patches on the banks, on which grow the pomegranate, the apricot, and tamarisk tree, presented a scene new and striking. The impression experienced in viewing the immense inundation led the mind to the Nile, the vivifying influence of whose waters renders Egypt one of the richest

\* In the vicinity of one of these villages, a few miles above Kornah, the Arabs of the Montefique tribe, then at war with the Pasha of Bagdad, had an outpost, and by means of a boat, and several large bundles of dried reeds and date leaves supported strong chains across the river, to prevent the Turkish admiral Bel Mos passing up his fleet, which consisted of four brigs to Shoog Shookh. As the steamer approached this blockade, several hundred Arabs were observed on both banks, but their chief, Shaik Faris, assured us that they had no hostile intentions towards the English, on the contrary that as soon as the wind became such as to prevent the fleet, at anchor two miles lower down standing up the river, they would slacken the chains and enable the steamer to pass; the wind fortunately in the course of the night changed, and the Euphrates passed upwards.

countries in the world. Here no similar advantage accrues from the rise of the waters—the desert exhibited is never otherwise, than in affording on the recession of the water, better grazing to the cattle of the wandering Arabs, and in fructifying the date tree, often the only food of a people who have no fixed habitation.

Shoog Shookh, “the market of shaika,” the capital town of the Montefique Arabs, and the chief emporium of trade in this part of the east, on the left bank of the river Euphrates, is a walled town, now containing from five to seven thousand inhabitants. Previous to being devastated by the plague, it contained a population of upwards of ten thousand. Opposite the town the river is about one hundred and twenty yards broad, with a current of two knots an hour. The channel is deep, with steep banks, not more than a couple of feet above the level of the stream, along which are many gardens, well supplied with vegetables, fruit and other trees, such as the *Salvadora Persica*, *mimosa Arabica* and tamarisk, which first begins to occur at this part of the river. Twelve miles higher up the *Phenix Dactylifera* ceases to predominate, the low flat banks being entirely covered with jungle of the *salsola* and tamarisk, in which are great numbers of very large wild hog, jackal, and occasionally lions. Above Shoog Shookh, there are several large villages of Montefique Arabs, the largest of which is called Fogleah, and possessed of upwards of four thousand five hundred huts; in their neighborhood is little or no cultivation, but large droves of bullocks, sheep and goats, are seen, while horses of superior appearance are plentiful. In one village in the immediate vicinity of Shoog Shookh, the inhabitants consider John the Baptist the Prophet, and not Mahommed; independent of this belief their religion is entirely Moslem. From the mouth of Hie, near which are the ancient ruins of Maggias, the banks of the Euphrates are dull, uninteresting, and without inhabitants, and the river becomes more winding and narrower, marking the proximity of the Lumloome marshes.

The first day's passage of the steamer Euphrates, through the Babylonian marshes, was auspicious in the extreme. Nearing them the river gradually narrowed, and commenced overflowing its banks in every direction, while at the same time it ran with a current of not less than four knots an hour, and often much more round the short and abrupt turnings the stream takes. The “Euphrates” steamed well; and was got round the sharp and abrupt windings of the river, chiefly by checking her by dropping the anchor the moment she neared the bank or struck, by which means, she was made to swing with

the current, and the vessel's head was often thus placed in the centre of the river; when in this position, the steam was immediately got up, and she generally went on clear of each bank, although the stream is not broader than sixty or seventy feet, frequently less, and certainly at the bends of the river, not much more than the length of the steamer—one hundred and five feet. It was the steep soft alluvial banks alone, that permitted her passage upwards.

The marsh is entirely covered with water—save here and there, where a few grassy islands exist, and where the reeds rise above the surface: it extends to the horizon on all sides, and presents an appearance of desolation, which the few miserable inhabitants at present residing on its dry parts but add to.

On the 22nd of May, the remainder of the Lumloome marshes were passed through by the steamer, with comparative ease; the boat was only once in difficulty from shoal water in rounding a point, but not so as to require the getting out of warps, &c. When clear of the marshy ground, and the banks began to get high, in the marsh they are often below the level of the river when at its height, and show some signs of cultivation, the turnings of the river became more abrupt, and the current rushed round them with a force of not less than six miles an hour. This, and the extreme narrowness of the river render the passages most intricate and difficult: often the strong current took the steamer, and she refused to answer the helm, flying round with its force, unless checked by the anchor suddenly being cast loose so as to be driven upon the opposite bank. In this manner, two anchors were lost, the first had a chain cable half an inch in diameter, the second one three quarters of an inch. The second anchor was lost in the following manner: at the last and greatest difficulty contended with, as the steamer was rounding a sharp point, where the current ran with unusual violence, so as to agitate the whole breadth of the stream with an appearance of shallow water, while the depth was very considerable, her helm became useless, and from the vessel's length, the power of the current acted so as at once to sweep the boat bodily round. The moment she was observed to give away to the stream, a large anchor was dropt, length of cable was unsparingly given, but it being impossible to do so with sufficient celerity, it broke, and the ship flew on the bank. She was speedily rid of the bank, and after one or two ineffectual attempts to round the point by the full force of steam, at last happily succeeded, by being purposefully sprung with the current's full force and that of the steam (which, though instantly stopt, still acted) on the left bank above the point, round which the current swept; from its soft and muddy nature, no

injury was sustained, and no further impediment occurred to the steamer's passing upwards. The stream continued very tortuous till above the town and fort of Lumloome, or Musahay, now a mass of ruins, where the river divides, one branch running up past Lumloome on the left bank, and the other towards Hillah on the right bank. After this division, the river becomes broad, and in every sense of the word, a navigable stream, with high and steep banks clothed with thick and interminable jungle of tamarisk, intermixed with the wild blackberry and caper bush, *Capparis Spinosa*, and a vast variety of the *tricozantes*, with occasionally the liquorice plant, which here grows to more than the height of a man, among which old ruins or the remains of some ancient canal, which formerly communicated between the two rivers, are seen. Above Esmay Aynee,\* the river increases to eight hundred yards in breadth, and its high alluvial banks have in them numerous holes, where king fishers of a white color, beautifully marked with black, have their nests, while the turtle dove, the blue jay of India, the black, and grey partridge, hawks and numerous varieties of small birds, occupy the jungle.

Thus the passage of the Lumloome marshes was accomplished, the greatest barrier to the navigation of the Euphrates, without the intervention of any difficulty, which for a single moment caused a hesitation, or the shadow of a doubt as to the practicability of success in a steamer the size of the "Euphrates"—one hundred and five feet long, and nineteen feet beam. I am therefore induced to believe that with a vessel shorter, and of more power, and consequently better adapted to the intricacies of the river at this part, the passage of the Babylonian marshes would always be certain.

The approach to Hillah is beautiful, like that to Bussorah, from the gardens on each bank, which besides those trees already named, are full of the fig tree, "*Ficus Carica*," and a beautiful foliaged poplar," *Populus Euphratica*."

From Kornah to Hillah, the average current of the Euphrates is three knots and a quarter; the average breadth about two hundred and fifty yards, with a depth of channel varying from two to five fathoms.

#### FROM HILLAH TO HIT.

Hillah four hundred and thirty-eight and a half miles from the mouth of the Euphrates, and five miles below the site of ancient Babylon, is built upon both banks of the river, and connected by a bridge com-

\* An Island.

posed of twenty-eight boats, made of hides coated with bitumen. Mr. Rich measured this bridge, and found it to be four hundred and fifty feet long. The town is inhabited by Arabs and Persians, and governed under the Pashalik of Bagdad. The whole population, including Turks and Jews, does not amount to ten thousand. Hillah is entirely built of brick, cemented with lime, or mud, and does not afford, with the exception of one lofty minaret, whose sides are coated with a vitreous matter of a blue color, any large or elegant public structures. The houses are low, with flat roofs, and their inner court yard is generally below the level of the streets and lanes, which abound more with filth, than the towns in the east generally do. The bazars are extensive ; but they are mostly occupied with coffee shops, and nothing in the shape of English manufacture exists.

Beyond and within the walls, which are considerably decayed, and unfit for the purposes of defence, are numerous gardens, all irrigated by the waters of the Euphrates in a manner something similar to ancient Babylon, regarding which Quintus Curtius remarks: "The buildings of this city do not reach the wall, but are at the distance of an acre from them. Neither is the whole city covered with houses, but only ninety furlongs, nor do the houses stand in rows beside each other, but the intervals which separate them are sown and cultivated, that they may furnish subsistence in case of siege." In these, wheat, barley, melons, cucumbers, &c. are cultivated, along with date and fruit trees. Many of them are the residence of Arabs, living in tents of black horse cloth—a mixture of the half civilized and unsophisticated sons of nature on the spot, where once the wealth and luxury of the world was. Beyond Hillah, on the plain of Shinar, the Birs Nimrod or tower of Nimrod is the most prominent and striking object visible, but it has been so minutely described by Rich, Porter, and others, that it is unnecessary to do otherwise than merely allude to it. The plain between it and the river is cultivated ; numerous remains of old canals take from its flatness, and contrast with the limited possessors of the soil at present, and those who in former days, changed the course of a great river to fertilize the surrounding country. For many miles above Hillah, on each bank, are huge mounds of broken brick and alluvion, with vast hollows marking the position of old canals ; those few which still permit the passage of water, have their termination in large lakes and morasses : but are these the remains of what was thought to be the work of former Assyrian kings, and which were said by Herodotus to be equal in extent to an inland sea ? I can only hazard conjecture in favor of their being the remains of such ancient excavations, as



on the right bank, about thirty-six miles above Babylon, the canal, which was said to connect the upper end of these with the river, called Pallacopas, still exists, and contains water as far as the eye can reach. All these canals are more perfect in their remains than any of the buildings of Babylonia Antiqua, and they evince how great and mighty the people were, who could leave such indications to posterity of human ingenuity and labor.

From Hillah to Felugia, the banks are flat and alluvial, with considerable cultivation and numerous herds of goats, sheep and bullocks; but with the exception of Moseabe, a small and populous town, no place of importance occurs, till below Felugia, where is the site of an old fortress called Aboo Grahb, of which nothing remains but the heaps of alluvion on which it was elevated. The ruins of a brick fort, point out the Felugia of Xenophon, which Plutarch says, is five hundred stadia above Babylonia, and which is one hundred and three and a half miles from Hillah. Higher up is the field of Cunaxa, where the younger Cyrus was slain; but nothing marks its site. About five miles from Cunaxa, the right bank is level and cultivated, with a low range of white sandy hills, running north and south, about seven miles from the river—the commencement of the desert. During the rise of the river, the swampy inundated state of the country is most extensive above Felugia, and is thus described by Mr. Rich. “The most remarkable inundation is at Felugia, twelve leagues to the westward of Bagdad, where the Euphrates breaking down the dikes, which confine its waters, they flow over the country, and extend nearly to the Tigris. On May 24th 1812, laden rafts were brought from Felugia to within a few hundred yards of the northern gate of Bagdad.” According to Rennell, there is a canal called Isa, which emanates from the Euphrates at Felugia, and enters the Tigris at the head of old Bagdad, the only one of the four of the Caliphate which remains open and that only during the floods; whether this refers to a canal called Aboo Grahb, near the mound already mentioned, of the same name below Felugia in a straight direction three miles, and which now runs inwards to the plains near Bagdad, without communicating with the Tigris, or to the canal Sugglavya, in a direct line five miles above Felugia, and which communicates with the Tigris, I know not, although I suppose Sugglavya must be the canal “Isa” referred to. The same author, in his work on the Geography of the Anabasis, states that the Euphrates, on its entering into the plains of Babylon below the supposed Pylæ, runs on a higher level than the Tigris, and that the Tigris is more elevated than the Euphrates in the

Lumloome marshes. Both of these statements are proved from the direction which the canals take; but Lieutenant Murphy's experiments on the level line between the two rivers on the plains of Bagdad, gave but a few inches difference, insufficient in a long canal, alone to influence the course of a stream, which in the Sugglavya runs with an average velocity of not less than three miles.

Long lines of tents, of the Dalem Arabs, who, as the steamer passed, gathered on the banks, dancing and shouting rude verses to our success, thus testifying their admiration and proving we were among a people not less friendly than well intentioned, surrounded by extensive cultivation, occupy both banks, which are still alluvial. The right bank continues flanked by a low range of flat topped irregular hills, of a white color, evidently sandstone of the newest formation, with perpendicular sides, but more generally running down in gradual rounded slopes to the alluvion; these are continued to a lofty minaret, called Imashaya, built on an elevated point of rock, close on the river. From this minaret, both banks of the river become rocky, and I take its site to be the spot known as the Pylæ or gates, for after leaving them, the country becomes barren, and as incapable of improvement as any part of the desert of Arabia, and the river's current is much increased in rapidity from its being confined by high land on each side, until above Hit, whose proximity is indicated by numerous arched gateways, built into the force of the stream from its edge, in which are immense undershot wheels, moved round by the power of the current, so as to raise water up in small clay troughs on a level with the tops of the arches, from whence it is conveyed in courses, to irrigate the soil along the elevated banks of the river. Five miles above Hit, two of these gateways narrowing the stream, increased its force, so as to prevent the steamer passing upwards, even though the vessel was lightened seven inches and her engines were in the highest possible order. Where this barrier occurred to the navigation of the river, it is nearly two hundred yards broad, but the two gateways project from both banks into the stream directly opposite each other, about forty feet from the one side, and sixty feet from the other, having, independent of these visible obstructions, their foundation, and a line of dead wall extending very considerably, giving to the current a force of seven miles an hour, and causing it to assume a line of elevation above where the dead wall is, from which the steamer uniformly turned back. Colonel Chesney mentions them as follows: "But what most concerns the subject of this memoir on the Euphrates, is the existence of a parapet wall, or

stone rampart in the river, just above the several aqueducts; in general there is one of the former attached to each of the latter, and almost invariably between two mills on the opposite banks, a wall crosses the stream from side to side, with the exception of a passage left in the centre for boats to pass up and down. The object of these subaqueous walls (mistaken by Alexander the Great for means of defence against his irresistible legions) would appear to be entirely with a view to raise water sufficiently at low seasons to give it impetus, as well as a more abundant supply to the wheels, and their effect at those times is to create a fall in every part of the width, save the opening left for commerce, through which the water rushes with a moderately irregular surface. These dams were probably from four to eight feet high; but they are now frequently a bank of stones, disturbing the evenness of the current, but always affording a sufficient passage for large boats at low seasons, and ceasing to be very perceptible, except by the broken surface after the water is swollen." These aqueducts were never looked upon as a barrier to the river's navigation, nor do I know if they yet are so, for at the period the attempt was made to pass by them, the stream was considerably swollen by a fresh, indicated by a diminished temperature of the water, and a rise beyond its usual confines. The force of the current daily diminishes, as the river falls, so that in time these arches would in reality have been little or no obstruction. But independent of waiting for this fall, warps might always be used to force steamers past, (native boats thus daily ascended,) were it an object to Government or commerce to navigate the Euphrates above Hit. The average breadth of the river from Hillah to Hit is two hundred yards, with a current from two, to six, or seven knots an hour.

#### THE GEOLOGY OF BOTH BANKS OF THE RIVER EUPHRATES, IN THE VICINITY OF HIT.

Hit, the Is of the ancients, on the right bank of the river Euphrates, is built on an elevated and detached rock of limestone, six hundred and thirty miles above the embouchure of the united streams of the Tigris and Euphrates, and nearly fifty miles above where the rocky banks of the river commence.

The town, surrounded by a stone wall and deep ditch, with the sides of the rock on which it is placed often perpendicular, still assumes an appearance of considerable strength, indicating that it must have been a strong hold of great importance in former days. Now it is in considerable decay, with not more than six hundred houses

built of limestone with flat roofs. It possesses no bazars, and the streets are narrow. The population is Arab, and does not exceed two thousand five hundred. The general caste of countenance of the inhabitants, is distinctly Jewish; but this is all that remains to mark the former connexion between Hit and Jerusalem.

Beyond Hit, is an extensive plain, broken by occasional ridges of elevated ground and solitary hills, not of great height, but in a geognostic point of view, highly interesting. Between the commencement of these, the end and back of the town, is a broad open valley, extending to the right and left several miles, on which are numerous small running streams, having their origin either from springs in the earth, or from the petroleum pits in the adjacent hills: these are uniformly saline, and with the exception of a few stunted rushes, deny all vegetation to the soil, which is soft and sandy. This water, immediately in the rear of the town, is collected in square or irregular compartments to evaporate by the heat of the sun, in order that it may leave its saline impregnation behind, which is gathered and used by the natives as salt, notwithstanding it contains a large portion of nitre. These salt ponds cover several acres, and petroleum is seen to issue from the earth, so as often to render impassable the pathway along them. The appearance of the salt crystalized is very beautiful, and the difference of specific gravity, indicating the quantity of saline impregnation, causes the water to appear as if divided by a thin plate of glass, the upper layer of water being clear and limpid, occasionally ruffled by the breeze, while the lower is viscid and of a light straw color; agitated, both layers mix like oil and water, quickly resettling.

The alluvion along the bank is not of great extent, but pebbles silicious or quartz, brought down by the power of the torrents on the mountains higher up, are deposited beyond the boundary of the alluvial soil, and these mixed with calcareous debris, carried from above by the action of the river and here left, mark that the river's forming power has been extended beyond the present alluvial range.

The structure of the hills and ridges near Hit, differ from those some distance beyond, which are composed of flæz limestone, distinctly stratified horizontally, with flat and extended summits. The plain in their immediate vicinity is calcareous sand, interrupted by huge tabular masses of limestone, rising above its level, and fragments of the same stone, (which also cover the hills), intermixed with porous calcareous Tuffa, whilst its lower parts are covered with saline efflorescence, and are entirely sandy.

The hills close to the town, beyond the salt ponds, are those in

which petroleum is found, for which Hit is famous; they are of very peculiar formation, and principally consist of ridges and solitary hills, composed of sand, containing a large proportion of calcareous particles, generally disintegrated, though in some places assuming a distinctly stratified appearance. The strata are of very small breadth, varying from a light yellow ochre, to a greenish grey color, running in a horizontal direction, but most frequently in a contorted one, so as to follow the line or general direction in which the hill or ridge runs. Such strata are mostly observed near the summits, while the lower part of the ridges are merely accumulated masses of calcareous and sandy particles, of an argillaceous appearance, easily broken up, considerably disintegrated on the surface, and mixed most abundantly with mica and sulphate of lime. In parts, occasionally irregular hardened argillaceous masses are cemented together so as to produce an amygdoloid appearance.

The most extraordinary appearance which these hills take, however, arises from their being intersected with repeated horizontal strata, from three to six feet in thickness, of gypsum, which often run not in one, but in two or three detached veins on the bases I have described, without contortion, and in several instances capping the summits so as to form a superincumbent mass. Gypsum is only found in these positions, or detached in blocks on the sides and summits of the hills, in which it appears as above described. In all it has the same character, being easily splintered, with translucent edges, and a pearly white, fibrous, splendent looking mass.

Frequently it has crystals of sulphur imbedded on its ragged weather worn surfaces, and sometimes the gypsum is found in crystallized masses, or impregnated with petroleum causing it to assume a black appearance. No limestone, such as obtains in the hills already mentioned, occurs in those which have the gypseous strata, but their hollows\* abound with petroleum which issues from their surfaces in considerable quantities.

On the summit of one detached hill, about eighty feet above the level plain, a few scorix were observed, but no other appearance of volcano. Nothing like lava nor any approach to basalt exists, and I was unfortunate in not finding any fossil remains, although I anxiously directed my attention towards obtaining them.

Among these hills are the bitumen, or rather the petroleum springs of Hit, famous for having been visited both by Alexander the Great, and the Emperor Trajan. The principal spring, the only one

\* In all gypseous countries remarkable funnel shaped cairties are observed.

now existing, is in a funnel shaped hollow in one of the gypseous and marly hills. It is forty paces round, and filled with a substance of a dark blackish brown color, in the centre of which bubbles up water, which floating off, runs down to the salt ponds, where evaporating, its saline impregnation is left behind. The water sometimes rises in jets, a foot and a half high from the centre of the pit, at intervals, while at other times it bursts out in considerable quantities, raising the petroleum into large blebs, which bursting, the water flows out with a gurgling noise. Besides this spring of water from the centre, smaller quantities issue from different parts of the pit.

The temperature of the water as it rises, was found to be 74° F. while the thermometer stood in the shade at 85°.

The centre of the pit is described as deep, but its edges permit the people who collect the petroleum to stand in it above their knees, so that they with considerable facility roll up the tenacious substance into masses, which are removed to dry in the sun; when thus hardened it is used chiefly for fuel to burn limestone in. Close by is a lime kiln in operation, as well as several in the neighborhood; in them, a very small earthy residue is generally left, and the flame burns with a strong heat and light. The petroleum, notwithstanding the quantity daily withdrawn, always continues at the same level, and the opinion of the natives is, that the supply in this pit is inexhaustible.

As has been mentioned, petroleum or mineral oil issues from the earth in small quantities from almost every hollow in these hills, and in the surrounding plains it also appears, but never in any great abundance. It feels very greasy, and is handled, provided the fingers are wet, without adhering; if on the contrary the hand be dry and force used, it sticks like pitch. As it first rises out of the earth, it is of a brownish black color with a greenish tinge semitransparent. It rapidly becomes opaque and hard, in which state it is easily broken with a shining resinous fracture. It is lighter than water and rapidly inflames.

This is the Bitumen Liquidum of Pliny, different from the *Ναφθα* \* and *Ασφαλτος* of the Greeks, and it answers to the description of the petroleum or mineral oil, found in Moldavia, "where springs of it flow from a track, where there is an alternation of beds of sandstone, marl, gypsum, and rock salt."†

Its present uses among the natives, independent of its being

\* There are springs of naphtha, about ten miles below Hit, at a place called *Νε-  
fata*; higher up the river, bitumen is found in veins, in considerable quantities.

† Jameson.

made a fuel to burn lime in, which is sent from Hit in some quantities to Bagdad, are to cover boats, preserve wood from decay, as well as to render impervious the irrigating channels from the gateways to the patches of cultivation along the river. It is also exported in very considerable quantities.

The plain of Hit is very scantily supplied with vegetable productions; those found are either of a saline or aromatic nature, and the chief cultivation by irrigation is wheat, surrounded by a few abortive date trees, the only wood in the vicinity.

The country on the left bank of the river, which is elevated above the level of the stream, from ten to twenty feet, is sometimes alluvial and sometimes rocky, and assumes beyond the line of cultivation, which varies from a quarter to half a mile in breadth, the following physical aspect.

Upwards of a mile in breadth, and of undetermined length beyond the irrigated soil, are mounds of alluvion, intermixed with pebbles so thickly as in some parts to consist of these entirely. This breccia is easily broken up, and possesses no firmness of texture to entitle it to be denominated otherwise than irregular mounds of intermixed pebble and alluvion. The pebbles are small and consist of quartz, and argillaceous matter, varying in color and shape: among them, are pieces of flint, similar to what is found in beds of chalk. Beyond these mounds, the surface of the soil becomes broken by the water courses of torrents, whose banks are formed of a loose calcareous sandstone, with numerous veins of a thin micaceous matter, running in a horizontal direction, as well as very thin veins of gypsum, of a honey-comb appearance. The basis itself is not distinctly stratified, and in general above it, there exist marks indicating the thickness of the pebble and alluvial deposit to vary from four to twelve feet.

Following the course of the largest of these torrents, dry the greater part of the year, the breccia deposit along the top of the bank is lost, and thin layers not worthy of the name of strata, of a very soft limestone, cover the soil. These, frequently broken up, cover the ground with loose irregular masses, which extend over almost the whole country, till advancing by gentle, but irregular slopes towards a range of hills, about two hundred feet above the level of the river, and two miles distant, the pieces of limestone increase in size and frequently form large elevated masses resting on calcareous sandstone. The hills themselves, are composed of crystalized limestone, of a soft nature with an irregular and shining fracture. Their formation is tertiary, stratified horizontally, and rests on a basis

of sandstone, which is frequently thrust upwards so as to leave the upper part of the ridges in some places only of limestone.

The tops of the highest ridges display marine shells, of a small size, imbedded in the calcareous mass. These are the only organic remains to be found: several caves and hollows in the sides of the hill occur, but none of them are of large size, nor do they present any thing interesting.

From the highest point, the whole country presents a sterile and desolate appearance, highly irregular in its surface, and utterly devoid of vegetation. Even the bank of the river shows little vegetable life; a few abortive date trees, and stunted trees of the *Populus Euphratica* with tamarisk, intermixed with *Capparis Spinosa*, and low thorny aromatic shrubs, are all that obtain beyond the cultivation, which is entirely wheat, barley, and the *Sesamum Orientale*. The approach to a dry and barren waste, which can never be improved by the most powerful arts of human industry, and which Xenophon thus described, "The country was a plain throughout, as even as the sea, and full of wormwood, and if any other kind of shrubs or reeds grew there, they had all an aromatic smell; but no trees could be seen. Bustards and ostriches, antelopes and wild asses, appeared to be the only inhabitants of the desert, and the fatigues of the march were alleviated by the amusement of the chase."

#### FROM THE EUPHRATES TO THE TIGRIS, BY THE CANAL OF SUGGLAVYA.

The entrance to the canal is about forty feet, with a current of nearly four miles an hour. Its banks are low and flat, covered with the liquorice plant, growing to the height of ten feet, often with a root four and five inches thick, excluding, save a few tamarisk bushes and long grasses, every other vegetation. The banks of the Sugglavya are steep, and not elevated above the level flat of the surrounding plain after the few first miles of the canal, nay, they are frequently lower, a fact which proves, with the general appearance throughout, that the greater part of it is a natural and not an artificial canal. In the plain, the remains of several old canals are seen in the distance, whose banks are often elevated forty or fifty feet, and present a gravelly appearance; no similar elevation occurs in the Sugglavya, on the contrary, where the liquorice plant and tamarisk cease, the surrounding flat of grass is equal and unraised in any one spot, a tract often unbounded, on which numerous herds feed in the vicinity of the black tents of the nomad races, who inhabit them. These people looked upon the steamer with astonishment,



and on one occasion, a party came down to the bank, with drums beating and a sword dancer in advance, to ask us to a marriage feast ; many of them were well clothed, but the trackers, who accompanied the steamer possessed nothing to cover their bodies, but one piece of coarse woollen cloth, sometimes worn as a cloak, sometimes simply wrapped round the waist, and, when in the water, formed into a ball, which they fixed on their heads. They are generally Herculean figures, though not tall. The canal which is about seventy miles long, is very narrow and tortuous during its first two thirds ; in its last, it becomes straighter and often as broad as fifty yards, with banks flanked by high reeds, with a stem several (from three to five ) inches in diameter, and in height not less than twenty feet. In the vicinity of Bagdad the Sugglavya enters a large lake, which contracts in a canal called the Mosade, previous to entering the Tigris five miles below.

The navigation of this canal, was accomplished in four days, in the following manner. The steamer entered the Sugglavya, stern foremost, and she slowly passed down the numerous and abrupt windings of the stream, aided by native trackers, frequently grounding on the steep bank; but, by the aid of poles and ropes, which the trackers held, uniformly got off, without any great damage, though at the expense of considerable delay. The stream in force was not less than four miles an hour during the whole of the first day's progress, and its turnings, often at right angles, were most numerous for about eight miles, when they diminished, so that the steamer was able to go on with precaution a-head. Still she frequently came upon the bank, striking so hard and fast, that hawsers attached to anchors fixed on the opposite bank, were required before she could be placed in the centre of the channel again. The second day's progress was equally tedious, the vessel slowly and not without constantly striking from one bank to the other, sometimes stern first, sometimes broad side down the current, and seldom in her proper position, got down the canal about five miles, when she grounded on a shoal bank, from which, after five hours hard and unremitted exertion, she was bodily hove off. Scarcely however, was she rid of this bank, than again grounding, the steamer remained fast during the remainder of the day and the night, nor was it until a renewal of labor the following day, that she was hove off into the stream, shortly afterwards again to ground. On the fourth day she grounded, as she passed the remains of an old bridge at the entrance of the Mosade, by which the steamer proceeded into the Tigris. In this manner was accomplished the carrying of an armed vessel from the one river to the

other, an event which has not occurred since the days of Trajan and Julian—a passage, which produced considerable moral effect on the natives of this part of Asia, impressing them with high ideas of British power.

#### FROM BAGDAD TO BUSSORAH.

The steamer remained at Bagdad a few days, and on the 24th of June, again got under weigh to return to Bussorah, from a place called Gorara, five miles in a straight direction below Bagdad. Passing the remains of Selucia, opposite to which on the left bank, is Ctesiphon; the only evidence to mark the site of the Greek colony, is a few alluvion mounds, irregularly disposed close upon the bank of the Tigris, while Ctesiphon has the tank Kessarah, and an extensive triangular wall, still in tolerable preservation. Below Gorara the gardens of Bagdad cease, and the country is flat and occasionally cultivated by irrigating wells at which bullocks are employed. The river itself is wider and nobler than the Euphrates opposite Babylon, while an occasional island occurs, on which the water buffaloe and other herds are on either bank; extensive mounds are observed in the distance on the plain, rising sometimes to the height of hills, but generally the whole is flat and covered with the soda plant. The rate of the current is about three miles, and the steamer navigated close to the bank, which bore marks of the river having lately fallen about six feet. Below Ctesiphon, the banks of the Tigris are less cultivated, and exhibit fewer signs of being inhabited than those of the Euphrates; the overlasting tamarisk clothes both with a thick jungle, rendered impassable by numerous creeping plants, the caper bush, and lion grass. Never does the tamarisk assume the appearance of a tree, and its small branches alone form the fuel of Bagdad; among these jungles the lion abounds, and we saw towards sunset three, basking on the river's edge; so independent were they that though fired at, they did not move.

Early in the morning of the 25th, part of the range of the Kuzistan mountains was visible, and about six o'clock, the steamer was brought up alongside the left bank, near an encampment of Montefigue Arabs, who offered us sheep, &c. for sale. Their tents of black worsted cloth, are on an extensive grass plain, surrounded by large flocks of sheep, besides bullocks, horses, and innumerable asses. The plain bears marks of having been lately inundated, as most parts of the banks of the Tigris hereabouts do, which, as the inhabitants are much more nomad on this than on the river Euphrates, may

account for the scanty population. Coose, a small village of about thirty reed huts on the left bank, was passed, and about two hours before sunset, the Kuzistan mountains were neared, running parallel to the river on its left bank ; their general aspect is similar to those in the Persian Gulf, with which they are connected. Their nearest approach to the Tigris appears from their base to be about twenty miles. The right bank is flat and extended with numerous Arab encampments, surrounded by small patches of cultivation—entirely wheat and barely—with the exception of one large clump of poplar trees, among which is a tomb of an Arab Peer, or saint. The name of this spot is “ Mugizil,” place of washing, to which bodies of Arabs are occasionally brought to be washed, previous to interment. Anchoring during the night, the vessel got under weigh at day-light, passing during the early part of the day a place called Ali Shergi, where, among a cluster of poplar, is an Arab encampment; the whole of the country is flat and very uninteresting. Colonel Campbell, in his journal published 1755, says, “ The river itself is grand, but the country furnishes scarcely an object for reflection. I do not remember, he adds, to have ever passed through such a vast extent of country, so uniformly dull and uninteresting, or to have spent eight or ten days, with so little to give birth to a new idea ” After the lapse of more than half a century, it has still the same aspect of extended sameness, inhabited by the Aboo Mohamed Arabs, who are justly esteemed the most barbarous and wildest of the tribes of the lower part of the rivers of Mesopotamia.

On the 27th of June, about noon, the “ Euphrates” came to an anchor, opposite the town of Bussorah, having performed at an average rate of thirteen miles an hour, the voyage down the Tigris, a river, which at all seasons is navigable.

I cannot conclude this memoir, without remarking on the native population on the banks of the Euphrates. They possess little of the apparent civilization of those living in fixed habitations, but they have much primitive simplicity, and showed on every occasion, when intercourse was held with them, a regard towards, and a desire to conciliate us, which, from the independent character generally ascribed to the Arab, I was not led to expect. It was not only in personal dealings with us, but in their crowding the banks, waving their colors, beating their drums, and shouting success, that they showed their respect to us, and, I am certain, with a native population so docile and friendly as they uniformly appeared, there is little to prevent commercial intercourse and rapid civilization. The fleeces of their extensive herds of sheep and goats, would alone form a valua-

ble article of traffic. That softness of the fibre of wool, of so much importance, uniformly exists; indeed, the wool of this part of Arabia has always been noted as superior on account of the great length of its staple, as is the wool of all sheep pastured on rich, argillaceous soils. Herodotus describes the Arabian sheep, distinguishing the two sorts of which the breed is composed, viz. the long tailed and broad tailed. The rich fleeces of Asia Minor, particularly those in the territory of Miletus, were considered by the Greek the finest of all, most likely because they confounded with the native fleeces of Miletus those of Arabia, which is finer than any I have seen from the central and upper parts of India. Wool, camel and goats hair, would always form a great staple commodity in this part of the world for exportation, and be greedily exchanged at the highest advantage for piece-goods, and other articles of imported commerce from England and India.\*

To write of the climate on the banks of the Euphrates from Bus-sorah to Hit, and of the country through which the canal of Sugglavya passes, requires much more observation than I have been afforded; but the register of the thermometer and barometer, appended to this paper, may afford some idea of its nature.

The change of seasons has generally been looked upon in this part of Asia, and in the Persian Gulf, as the most sickly time. The latter end of May and the month of June have uniformly been marked by increased sickness in the crews of the Government vessels, serving in the Gulf of Persia, and there exists no doubt in my mind from the many circumstances known to me, that fevers in the Gulf have their origin in atmospheric changes, which influence fever throughout its whole course, and cause it to assume a type often very fatal. The difference of latitude is so small between Bushire and the part of the river Euphrates the steamer ascended, that the range of indicated temperature can exert little influence on the health of a crew of Europeans, and the changes of seasons must be nearly at

\* At present I am not aware, that any wool is exported from this part of the world, for the inhabitants do not shear the fleeces, but content themselves with gathering what falls from the animal. If therefore, it forms a part of native trade, it must be so small as only to relieve the country of a portion of what it can so abundantly produce. Attention to this branch of commerce is well worth the notice and enterprise of individual and associated merchants; their outlay would be repaid in a commodity, more generally sought after than almost any known article of trade. Specie is a mode of payment, which is not likely to be afforded by the Arab for the—to them at present—luxuries of England, yet for these they will readily grant in exchange a profitable and universally marketable article, which can always under the protection of steamers, be rapidly and at little expense conveyed down the river.

similar periods in both places. The unusual healthiness of the Euphrates crew at this season\* must have arisen from their being in a much better climate than that of the Persian Gulf, a climate much drier in its nature and much more equable.

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II.—*Some notices of the Seychelles, the Almirantes, and other Islands and groups of Islands, situated between the Equator and 12° South latitude; and between 45° and 75° East longitude, &c. &c.* By Major William Stirling, 17th Regiment, Bombay N. I.

My shipwreck on *Astova* and subsequent visit to the *Seychelles*, gave me an opportunity of examining those islands, and at the same time threw me among seafaring and other intelligent persons frequenting the islands, situated within the limits I have above stated. I have availed myself of the opportunity, thus afforded, to collect the information which I now offer to your Society. It is scanty, but I believe new, and as such, I conceive, worth your acceptance; though, as I have not been able to consult any work on the subject, it is given as I obtained it, with all its originality and imperfections.

Captain Owen's new chart is considered by many men navigating these seas quite correct, and therefore, I refer to it for the true position of the places mentioned.

In my description I begin with the *Seychelles* as the most important; Mahé being the residence of the Government agent, who is subordinate to the Governor of the Mauritius.

The *Seychelles* consist of thirty two islands of various sizes, from Mahé the largest, which is about eighteen miles long, by from one to five broad, down to some which are little better than naked rocks. They occupy what is called *Mahé Bank*, or *Seychelles Archipelago*, on the chart, and are all composed of granite of several varieties; their bases being more or less connected and surrounded by coral reefs.

These islands were first discovered by the Portuguese, who called them the *Seven Brothers*, from a group of seven island near Mahé; but they were first settled by the French, about seventy years ago, when Mahé-De-la-Bourdonnais was Governor of the Mauritius. He gave them collectively the name of *Seychelles* in compliment to the then Minister of Marine in France. The island of Mahé was called after himself.

The names of the other principal islands are Praslin, Silhoauette,

\* Only one case of fever among forty Europeans occurred.

and La-Digue. They are all mountains, well watered with streams, richly wooded, and inhabited. The summit of Mahé is about two thousand five hundred feet high. The scenery is beautiful; but Mahé, the only town or village in the group of islands, is a poor looking place. The houses, built of wood, and covered with shingles, bear a very unprepossessing, weather worn appearance.

The inhabitants are of French origin, descended chiefly from the settlers of that nation in the Mauritius and Bourbon. The whole population of the island is computed at about three thousand whites, and four thousand two hundred blacks; (some years ago the aggregate population amounted to nearly ten thousand). Yet there is not a church, or a chapel, or minister of religion of any description; nor any public school or place of education supported by Government, or where a black person can be taught to read or write. There are a few private schools for the white children. A marriage or divorce is the business of the magistrate; a burial is conducted by the friends or relations of the deceased. But to have the rite of baptism performed, they repair to the Mauritius, or await the accidental arrival of a priest on the island.

There used to be a subaltern's party from the Mauritius stationed on these islands, to check the irregularities of the seamen of the whalers, but they were withdrawn about six months ago. The only armed force now at Mahé consists of nineteen Gens d'Armes.

The coin in circulation on these islands is Spanish dollars; but English and Indian money are also current. The sovereign passes at five dollars; and a Bombay and sicca rupee pass together for a dollar.

The public functionaries consist of a Government agent; a sub-agent, who is also special magistrate for the protection of apprentices (late slaves); a Justice of the peace; and a Superintendent of police.

The sperm whale is found about the Seychelles, but the numerous whalers (English and American) which frequent these seas are precluded from resorting to Mahé (a most convenient place of refreshment,) by heavy anchorage dues, and driven to spend their money, and ruin their health at Madagascar, and on the coast of Africa.

Mahé itself sends out three small whalers, but they are all manned with Englishmen; the stout heart and nervous arm of that nation, being confessedly necessary to ensure success in such a dangerous, but spirit-stirring employment.

The Isle of France hurricanes do not extend to Seychelles, their limit being 10° south, and, Bourbon having no secure harbour, the English and French men of war sometimes spend the hurricane months at these Islands.

The Seychelles produce pigs and poultry of every description in great abundance. Fish also of indifferent quality; wild pigeons, doves, and willow birds; tree and rock oysters; maize or Indian corn; very fine cotton and rice; coffee, sugarcane, chocolate, tortoise and turtle-shell; shells and corals; bread fruit, raspberries, manice, mangoes, bananas, lime, oranges, guavas, melons, pumpkins, tamarinds, pine-apples, cabbages, carrots, turnips, sweet potatoes, sallads, palmiste,\* cocoanuts, budams, yams, tobacco, a few cloves, grapes, cinnamon, hyapunna, (a kind of tea); abundance of fine timber for furniture, ship building, and all domestic purposes. The "cocotier de mer" grows indigenously on three small islands of this archipelago, and in no other part of the world.† The most rare and beautiful shells are found at Mahé. The "pot-a-case" a singular plant, and the leaf insect are also found there. The "cocos de mer," cut longitudinally furnishes the trenchers used in kitchens, and by the slaves.

The chief amusements of the inhabitants consist in smoking, visiting, dancing and playing at Dominos. Free masonry is in high repute among them, though they have no lodge. They are not great readers, but some of them have the works of the best French authors; and I was gratified to find in their libraries French translations of the Vicar of Wakefield, the Children of the Abbey, Young's Night Thoughts, and of several English books of travels and natural history; all very much admired.

The climate of the Seychelles is mild, and considered very healthy; measles, small pox, cholera morbus, and most other diseases are unknown. But the inhabitants are sad sufferers from the erysipyas, as they call it, or Elephant leg. At *Curieuse* near *Praslin*, there is an establishment formed at the recommendation of Mr. Harrison for lepers, who are sent there from the Mauritius and all its dependencies, and are well taken care of by a medical officer.

From the Equator to 12° south, the south east monsoon prevails from May till November; and the N. W., N. N. W. and varicbles from November, inclusive, till May, which is the rainy season. The weather is very sultry, and the rains fall with the greatest violence in December and January. From May till October, the climate is said

\* To obtain one dish of palmiste six or eight trees are cut down. It is the heart of the new shoot at the top of the thorny palm that is eaten. On its being cut the tree dies.

† Synonyms, *Lodoicea Secellarum*; *Lodoicea Maldivica*; *Cocos Maldivica*; *Palmier de L. Isle Praslin*, &c.

The above generally grow double, but they are frequently quadruple, and even quintuple.

to be delightful. This is the period when the fishing and cultivating parties leave Mahé for all the islands of the group, some of which are public, while others are private property; the right of possession and of fishing, having been conceded to individuals by the Mauritius government, on certain conditions.

Hawk-billed turtles, from which they obtain the tortoise shell, but whose flesh is poisonous; the green turtle whose flesh is so luxurious a treat, and from which oil and turtle shell are procured, and the edible land tortoises, are the chief objects of the fishers; while the rearing of pigs and poultry, growing maize, sweet potatoes and other vegetables, together with the manufacture of cocoanut oil, are the objects of the cultivators.

For each island there is a superintendent, generally a French creole, with from twenty to one hundred men of color. The musquitos are so abundant and venomous on some of these islands, that each man is provided with a sack, made of Madagascar cloth to sleep in. Strange to say, there are very few of these insects at Mahé.

The months most favorable for procuring the hawk-billed turtle, are from July to December, while from December to March are the best for obtaining green turtle; though the latter are to be found plentifully all the year round. The tortoise shell of these islands is very highly esteemed.

The green turtle seldom comes ashore to lay during the day, and the hawk-billed never during the night. They both lay many hundreds of eggs in holes, which they dig in the sand, then cover them over, and leave them to time to hatch. The hawk-billed turtle weighs about 100 or 150 lbs. while the green weighs from 200 to 300 lbs. The former yields from two to six pounds of tortoise shell, worth from six to ten dollars per pound. In some countries, where the creature is taken alive, the fishermen bury it in the mud or sand as far as the edge of the shell, and by kindling a fire on its back, or by pouring boiling water on it, the shell becomes detached. The turtle is then liberated, and as is affirmed, becomes furnished with a new shell. In the Seychelles, however, this practice does not prevail.

The turtle are secured in two ways: first, by "turning them" when they come ashore to lay; and secondly, by striking them from a canoe, when in the sea, with an iron peg fastened to the end of a stick secured by a line and thrown like a harpoon, but from a greater distance. The Seychelles people called the hawk-billed turtle "caret" and the green turtle "tortue." Boats are constantly on the look out about the islands for "caret." The patience and perseverance of the fishermen, in waiting for an opportunity to strike (some-



times several days) when they have caught a glimpse of the fish, are said to be very remarkable.

The flesh of a green turtle is worth at Mahé, from three to four dollars. It also yields a thin shell, which has of late been brought into use in Europe for veneering, and melting into an imitation of tortoise shell. Oil is made from the fat; and the eggs are sent to Mahé or the Mauritius.

The Seychelles have little trade, being much fettered by the regulations of the Mauritius. They formerly exported cotton, coffee, coir-rope and oil, but since the slave trade has been modified, they have not had hands to produce more than enough to supply their own wants. They are beautiful and fertile islands, and might be made to produce any thing. They derive nearly all their imports from the Mauritius, which they look upon as a place of immense importance, and the focus of every thing luxurious and elegant. On these islands grows such good timber for ship building, that vessels of the size of five hundred tons are constructed of it. The ornamental wood for furniture is the *Bois de natte*, a reddish wood, very close grained, and marked something like fine heart of oak. It is highly esteemed at the Mauritius, but it is now very scarce. The most curiously marked is said to grow on rocky places, where, from the difficulty and slowness of its growth, it becomes contorted and stunted.

Next in importance to the Seychelles, are the Amirantes, an extensive group composed of twelve or fifteen low coral islands, and many banks and reefs. The principal islands, Marie Louise, Isle des Roches, Isle Poivre, Isle De Ros, Isle Remire, and Alphonse, are permanently occupied. The *African islands* are mere banks.

The Amirantes all belong to the inhabitants of the Seychelles. Isle des Roches is the largest island, but Alphonse is the most fertile. The soil of the latter is deep and black, and produces a great variety of vegetables, fruits, and timber trees, large enough to hollow into canoes. It belongs to Mr. Huteau of Mahé.

There is nothing like a town or village on the Amirantes. The smaller islands are only visited during the fishing season, for "caret," turtle, and shells, of which the finest are found upon Marie Louise, but a tremendous surf makes it difficult of access. The Harriett, an English whaler, was wrecked on the then unknown reef *Fer-à-Cheval* near Isle Poivre, about two years ago.

These islands produce some cotton, abundance of Indian corn, pigs, poultry, sweet potatoes, turtle of both kinds, firewood, and a few cocoanut trees, which do not thrive well on all the islands. There are also a great number of doves, and wild pigeons, tropic birds,

boobies, man of war hawks, and other sea birds. On St. Etoile there are said to be sea crows.

Diego Garcia or Chagos Archipelago, is an immediate dependence of the Mauritius. These islands are all flat coral, covered with cocoanut and other trees; and the reefs which surround and connect them are remarkable for their abruptness, the sea being nearly unfathomable close to them. There are four families permanently settled on Diego Garcia, and a few on Salomon Islands and Six Isles. They breed pigs and poultry; also asses, to work in their oil-mills, cocoanut oil being their staple production, in the manufacture of which, lepers were formerly employed under an idea that it was a cure for their disease. These islands produce fine shells, and the *talo-maka*, a lofty and spreading tree, of white timber, valuable in ship building.

Coetivy belongs to gentlemen at the Mauritius, and produces abundance of cocoanuts, from which a great quantity of oil is made. It also produces Indian corn, fruits, &c. There is a small slimy pond in the middle of this island of unknown depth, in which every thing thrown immediately disappears.

Galegas also belongs to a gentleman at the Mauritius. It consists of two small, low, coral islands, between which there is communication at low water. They abound in cocoanuts, pigs, fowls, Indian corn, limes, bananas, and vegetables.

Juan-de-Nova, is a group of low coral islands and reefs, belonging to a gentleman at the Mauritius. He employs people occasionally on the largest island in catching turtle and fishing. There is fresh water, and a few cocoanut trees on it. There is also said to be a breed of wild dogs, which are very expert at catching turtle and fish. Juan de-Nova has good anchorage to the northward.

In *Providence Island* and reef, consists one of the greatest dangers in these seas. The reef runs twenty miles out from the land. The following ships have been wrecked on it,—L'Houreuse, French frigate in 1769; Duke of Kent, about 1832 3; Pysche, in 1835; the Oure in 1836; besides a vessel bound from the Mauritius to Seychelles, whose name I have forgotten.

This island produces cocoanuts, Indian corn, sweet potatoes, and plenty of fresh water, and its shores abound in turtle and fish. Providence Island and its reef are low coral. St. Pierre is a very small, low, and flat island, not occupied.

The *Cosmoledos* is a group of seven or eight flat coral islands, abounding in turtle of both kinds, and in fish. There is good anchorage but no fresh water, and of course they are not inhabited.

*Assumption* is also a flat coral island with a small hill in the middle. It has no fresh water ; but turtle of both kinds abound.

*Glorioso*, consists of two coral islands and a rock; upon one of them there is fresh water, and the shores abound in turtle of both kinds, and beautiful shells. Mr. Michaud of Mahé has the grant of *Glorioso*. The *boobies* of this island have blue bills and legs, with red chests.

*Aldabra* the westernmost group, within the limits I have prescribed myself, consists of several islands, the largest of which is nearly twenty miles long, and of a singular coral formation, being surrounded by a barrier wall, six or eight feet high, of sharp, firm, and nearly impassable coral, outside which lies a sandy beach. This wall of coral throws out shoots in some places across the island, dividing it into compartments; while round the inside of the wall, grows a narrow belt of thick wood. There are occasional deep fissures in this coral bank, through which at high tides, fresh water spouts to considerable height. The island abounds in land tortoises, and turtle of both kinds.

Mr. Huteau of Mahé has the grant of it, but it is not permanently occupied. There is good anchorage at *Aldabra*. The tide at full and change, rises nine feet, and the current runs N. W. four and five miles an hour. There are no cocoanut, but plenty of wild fig trees on the island.

*Astova* is an island ten or twelve miles in circumference, with a lagoon (only two or three feet deep) in the middle, which reduces it to a mere shell. The land in general is very low, and thickly covered with brushwood and small trees, but there are occasional sand-hills from fifty to one hundred feet high. The current runs rapidly past it, to the N. W. and the tide rises at full and change about eight feet. It is a most dangerous island to approach: the Portuguese ship *Le Don Royal*, laden with slaves; two French ships, which went to save them, and the English ship *Tiger*, whose crew was not relieved, for sixty-eight days, have been wrecked on it at different times.

*Astova* lies south of the *Cosmoledos*, and a ship in mid channel can see both islands at the same time. The soil of *Astova* is sand, based on coral rock, singularly elevated above the level of high water mark, from three to twenty-five feet, presenting in most places a rugged and forbidding aspect from the sea. It is said the slaves belonging to the *Don Royal*, lived on *Astova* thirty or forty years, and that their children upon the island were a remarkably fine race. The survivors have been removed to Mahé.

We found no bones nor other human remains on the island. There

is a fine bay or sandy beach on the N. W. side, the water of which is shallow to the edge of the reef, when it suddenly deepens to thirty-five, fifty, one hundred fathoms; and, at two cable's length, there are no soundings. Fresh water was first discovered on Astova by the crew of the Tiger, at the depth of eight feet from the surface of the ground. Green turtle, mullet, and other fine fish, land and sea crabs, and beautiful shells, madrepores, and corals, abound on its coast.

Astova is uninhabited. Its true latitude, from several observations, is  $10^{\circ} 3'$  or  $10^{\circ} 6'$  south. The officers of the Tiger had not the means of fixing the longitude, but the Emma, whaler, which kept her reckoning, and took her observations with great accuracy, corroborates Captain Owen's chart in making it about  $47^{\circ} 31'$  east. The weather during the period we were on the island, (August and September) was rainy and boisterous.

The birds of the island are crows, with white necks and breasts, wild ducks or teal, humming birds of beautiful plumage, in great abundance; a small bird, sweet noted like a linnet; the tropic bird, (with one red feather in the tail, and which lays but one dirty red egg in the sand under the bushes;) man of war hawk, boobies, white gulls, plover, rail, water wagtail, sand piper, dove, curlew, and a large bird like the heron; we reckoned ten or twelve flowering plants, some of them highly aromatic. The trees are not large, but the timber of some of them is very hard and beautifully veined; from the bark of one species, I prepared excellent red ink. We found, had our detention upon the island required substitutes, stout creepers growing, that would have assisted us in making fishing nets; rats, (the only quadruped, but they are numerous) whose skins when dried and sewed together, might have furnished our bodies with covering; and a kind of wild hemp from which we could have made thread and strings. Salt we procured by boiling down the sea water, and we were enabled to keep our turtle fresh for two or three days. The insects and reptiles of the island are small centipedes, ants of different kinds, spiders, moths, butterflies, grasshoppers, crickets, musquitoes, bees of different kinds, lizards, dragon flies, hornets, and sand flies.

I have brought away numerous specimens of seeds, wood, corals, shells, coral insects, and of almost every substance found on the island, and on its shores. I also surveyed, and constructed a map of it; collected and dried specimens of all the flowers, and wrote botanical descriptions of them, but which I have not had leisure yet to unpack and arrange. The specimens of the large foreign drift timber, and of the seeds and volcanic fragments from the shores of Astova,

will enable any person who can determine the native places of such specimens to throw much light on the currents of that part of the ocean, which are at present but little understood, and very dangerous from their great rapidity.

*Gama Island*, (doubtful on the charts) was believed to be seen from the "La Prevoyante" Maria Joseph de St. Anné, at 3 P. M. steering east four knots an hour ; lat. at noon  $2^{\circ} 32'$  south, longitude  $75^{\circ} 35'$  east : on the following morning several boobies were seen flying from the direction of the supposed island, which was considered a strong proof that land had really been seen ; as those birds are always observed to fly from the land in the morning, and to it at night.

I will now conclude with some observations on the formation of coral islands.

The coral rocks whilst under formation, are worked upon in ridges, like an ill ploughed field, very rugged and uneven. They are covered with very short, red, green, and other colored mosses, which I conceive to be not only the food of the insect, but from its softness and closeness, a protection to it in its operations, against the force of the tide and other injuries, that without such defence it would be exposed to.

On breaking the coral, it is in some instances soft as chalk, but in others nearly as hard as flint, and the insects are equally numerous in either. The irregularities and hollows in the rock, contain molluscæ and other marine animals of various, and mostly very ugly, appearance. The interior of the coral contains immense numbers of shells of different kinds, living and dead. On breaking up a piece of coral, fish, sometimes alive, are found in its intestines, and should a fragment be detached from the mass by the waves, if not washed out of their reach, it is seized upon and quickly cemented to it again by these active and industrious labourers, and with such success, that the surface of the reefs in some places (particularly at Astova) have the appearance of an artificial terrace.

It has been asserted that the lagoon is a general feature of coral islands. Certainly many coral islands have the lagoon, but that is merely to me a proof that the coral insect works in ridges and other fantastic forms ; for example, if the island of Aldabra was not so highly elevated above the sea, the waters would have forced their way through the barrier wall, which I have described on that island, which would then have soon become a bank surrounding a lagoon, exactly as at Astova. Moreover the fact is, that there are more coral islands *without* than *with* a lagoon.

A coral island may be supposed to be formed as follows, for it

must be observed that the coral insect never works above the water: The reef formed by them having reached the surface of the sea, trees, timber, sea weed, leaves, mosses, lichens, sponges, sand, mud, stones, and particles from other islands settle on it, and become cemented together by their own weight, and by the coral worms, molluscæ, and other gelatinous particles, contained in various forms in the sea. Then sea birds, turtle, and other Amphibia, with the various crustaceæ and other inhabitants of the deep, "which own not man's dominion," frequent or inhabit its shores, and by their debris accumulating, stability is given to the whole, and an island fit for the resting place of man is brought into existence. But before it be ready for his permanent residence, seeds of plants, of trees, and shrubs will be carried there by birds, or by the waves, some of which will take root and flourish; insects will live on their leaves and branches; birds will flock to them, and find shelter and food; quadrupeds may find their way there; the coral worm will continue its labours, extending the limits of the island. Storms, and the ordinary course of the currents and the tides, will throw materials upon its shores, to *elevate the surface* and vary its outline; animal and vegetable matter will mix with the soil, and the rains and dews of heaven will water and fertilize it, rendering it fit to produce herbage, and shelter for man and beast.

On Astova, we found the indisputable marks of those slow, but sure operations of nature; and that island seems now to have arrived at a state ready to yield to man his bread by the sweat of his brow, and capable of producing every plant that is pleasant to the sight, and good for food. It is situated in a healthy climate, with plenty of fuel, fresh water, fish, turtle, and some good edible birds. Our dogs, pigs, poultry and sheep, thrive well under the most unfavorable circumstances; and almost all the garden seeds, we sowed experimentally, came up well, although it was evidently not the proper season for sowing them.

The coast of this island (and indeed of all the islands) is strewn with foreign plants and timber trees, of many kinds and sizes, from the broken reed to the gigantic teak and cedar, and with remnants of wrecks of different periods, countries, and materials, from the canoe to that of the largest ship. A four pounder cannon, and two anchors of rather ancient manufacture lie near the north reef. I also found gums, lava, one small piece of basalt, pumice stone, and seeds of several kinds of trees and plants on the beach.

### III. — *Report from Acting Commander Nott of the Indian Navy, on the Traffic in Slaves, &c. carried on at Massowah.*

(Presented by Government.)

**Massowah.**— Population between three and four thousand. It is considered far superior as a port, and also in a commercial point of view, to any place on the western side of the Red Sea. Merchants from the interior of Abyssinia come and reside here during the Hadj, with their agents, whose guests they are for the time. The agent considers himself responsible for any insult or offence offered to the merchant during his stay with him.

The articles of export brought here from the interior of Abyssinia for other ports in the Red Sea, are slaves, musk, hides, elephants teeth, gumarabic, very excellent ghee, and bees wax.

On the 16th February, there were in the town of Massowah one thousand slaves ready for shipment in small vessels of twenty-five tons, for Juddah. The nations of these slaves are, 1st. Gallas, who are faithful, clever, and capable of attaining any art or science, but prone to suicide. 2d. Abyssinians, for the most part christians, generally entrapped into slavery by the mussulmans who inhabit the borders of Abyssinia, between the mountains and the sea. 3rd. from Seedamah a christian country in an unknown part of Africa. 4th. Shengalah slaves, are negroes living on the northern frontier of Abyssinia. These last are never transported beyond the precincts of the island Massowah. It is to be remarked, that there are still some Abyssinian and Galla slaves, who are born moslems, but who are nevertheless kept in slavery.

It is stated that the Habab, Halli, and Shahoo people, (all moslems) gain a livelihood by kidnapping and making slaves of Abyssinian christians, and although it is acknowledged that none are slaves but those who have been bought, or taken in war, yet the principal merchants have often appealed in vain, to the Turkish Governor at Massowah, to liberate kidnapped christians.

It is affirmed, that 25 per cent is lost on slaves from Massowah to Juddah by sickness.

The nayb of Arkeeko ( a town on the S. W. Massowah Bay ) levies a tax of one dollar per head, on slaves brought from the interior. The king of Abyssinia, two dollars upon every three slaves; Oubeeah, the hereditary prince of the province of Seemaner, residing

at Adoa, one dollar a head. The slaves are sold by auction, and the auctioneer gets one dollar per head.

Last year according to the account of an Abyssinian merchant, there were sold at Massowah one thousand five hundred and three christian slaves.

A Galla slave, aged about 25, is worth from thirty to, forty dollars, at Massowah; a good female slave for the Harem, sold not long since for one hundred and fifteen dollars. The Abyssinians purchase and keep, but never sell their slaves.

Habab, means that part of the country extending coastwise from Ackeck island (a short distance south of Suakin) to the bottom of Annesley bay; and inland, it is said to extend to the first range of Abyssinian mountains. The people inhabiting this part are in language, faith, manners, and customs, completely distinct from the Abyssinians; their faith is now the moslem, to which they are said to have been converted about one hundred years ago.

The musk comes from Nareeah, a country to the S. W. of Gondar. From one thousand two hundred, to one thousand five hundred horns of it are said to be brought to Massowah annually. The Nayb of Arkeeko levies one dollar upon every horn. The Governor of Massowah takes one tenth of all the musk brought here, and disposes of it at his pleasure, generally sending it to Juddah. A large horn is sold for one hundred dollars, and contains from six to seven local pounds; the small horns contain from two to four pounds; (a local pound is equal to one English pound). A first rate caravan the other day brought twenty-five horns. Of late, the merchants have so adulterated this commodity, that the price of a horn has fallen from five hundred to one hundred dollars.

A caravan has sometimes brought four hundred teeth. The Nayb of Arkeeko exacts one dollar upon every tooth weighing 40 lbs.; this is almost equal to five per cent. of the value. At Massowah the ivory is sold in the presence of the Governor, who takes five per cent. At Adoa a tooth pays two dollars. At Halli on the frontier, quarter of a dollar, and again by the Hassaorta tribe, half a dollar; this duty varies according to the size of a tooth. No gold dust is brought from Abyssinia to Massowah at present. Of ghee, thirty thousand pounds are exported annually from Massowah: ten pounds are generally worth two dollars. The freight on one hundred pounds is, to Juddah, three quarters of a dollar, and to Hodeida or Mocha, half a dollar.

The gum and ghee come from the Habab tribes, and the provinces of Hammassane and Kayackor, which people though speaking



the Abyssinian language, reside on the eastern side of the Abyssinian mountains.

Moosa Maffairah, the principal banker and merchant at Massowah, takes in fifteen thousand dollars worth of gum every year, more than one half of what is produced. One dollar for every ten pounds of gum, or ten per cent. of the value, is paid as duty. The gum is generally quite white.

The Nayb of Arkeeko exacts no duty on hides. At Massowah within the last two years, the duty on this article has been increased. On an average, four collars of glass beads, or a little more than one eighth of a dollar, is levied upon each hide.

In general the duty upon every thing at Massowah is one tenth. There is no duty upon articles of apparel.

For maintaining the navy and light-house, one hundred dollars are allowed per month; for artillery and stores, two hundred and fifty dollars; pay for the armouts or irregular troops, fifty dollars; The Governor's personal pay is one hundred dollars per month; his secretary's, forty dollars; and for the supply of wood and water, which is brought from Arkeeko for all the government agents, ninety dollars. The Governor pays to the Nayb of Arkeeko one thousand dollars per month. Total expenses of Massowah per annum, nineteen thousand, five hundred and sixty dollars.

The Nayb of Arkeeko pays the Governor of Massowah annually between one thousand six hundred, and one thousand seven hundred dollars.

Corn is brought to Massowah for the "Habab," from Yemen. They grow but a small quantity, and only in the vicinity of Massowah; the corn here spoken of is dhoura. Indian rice is imported not only at Massowah, but at Arkeeko.

When the dues collected at Massowah are not sufficient to defray its expenses, the Governor borrows from Moosa Maffairah, the principal banker before mentioned.

Dhalac island two years ago, yielded one thousand two hundred dollars, but from the decrease of pearls, it is said at present to yield per annum, only seven hundred dollars.

*State of Abyssinia.* In the province of Tigré near the sea, there are two chiefs, one named Kassai and the other Oubeeah. The latter, the hereditary prince of the province of Samen, is consequently a subject of the Governor of Gondar. Oubeeah overran the part of Tigré and possesses now Adoa, and Axum; Kassai possesses the mountains to the S. W. of Arkeeko; these are sterile, but he possesses also the salt plains which supply salt to all Abyssinia; a

commodity used as money : a dollar in Gondar is worth thirty-five pieces of salt.

Kassai is generally preferred by the people to Oubeeah, and he has lately, by the assistance of English muskets, obtained a great victory over Oubeeah, and forced him to sue for peace, which has been concluded.

There are said to be still two thousand English muskets remaining at Arkeeko.

Gondar obeys Ras Alli, and his mother, who is reported as being very clever in government affairs.

To the north of Gondar are the provinces of Denbayah and Gomoduyah, they are commanded by a general of Ras Alli's named Coomfao. This is the individual who, in the month of April last, obtained a signal victory over the Pacha of Egypt's troops, (commanded by Koorshid Bey) at Muttammah, a town taken by the Pacha from the Abyssinians. The occasion of the war is said to be as follows. Koorshid Bey made an inroad into Abyssinia, and captured one thousand three hundred christians whom he despatched to Sennaar.

The war is not yet at an end. It is reported that the Pacha of Egypt has sent a great reinforcement of troops to Gondar, which is eight days journey for an army. Koorshid Bey, is said to have written to the Governor of Gondar to say, that he would shortly be in his town and profane all his churches.

Koorshid Bey is now ( 4th March 1838) absent on leave at Cairo.

The above was related to me by an Abyssinian merchant, about to return into the interior, and interpreted into English by Mr. D' Abbadie, a gentleman apparently very much interested in, and about to explore every part of, Abyssinia.

#### IV.—*Note on the Island of Karrack in the Gulf of Persia.*

By James W. Winchester, A. M.

Karrack, or Kargh, is a small rocky island, twelve miles square, distant thirty miles from Bushire, in a North-west direction, whose local position is very favorable to commerce, as it commands the navigation of the Bussorah river, and has an easy communication of a few hours sail with the Persian and Arab shores.

Towards the end of the eighteenth century, it was occupied by the Dutch, under Baron Kniphausen, who obtained a right to the island from the Shaik of Bundereeg, and fortified it. During his government, in the short space of eleven years, the population rose from

one hundred poor pilots and fishermen to eleven thousand : but no sooner were the Dutch driven from the place than its importance rapidly diminished, and now the fort of Kargh does not contain five hundred inhabitants, whose chief occupation is to pilot vessels up the Shat-el-Arab to Bussorah.

The island runs north and south. Its southern extremity is rocky, and elevated nearly three hundred feet above the level of the sea, while its other extremity is low and sandy, having the fort of Kargh on its north-east point. The rocky portion rises abruptly from the sea, and its summit is a table land, which has on the greater part of its surface a thin loamy soil, cultivated in the rainy season. The sides of the ridges presented to the sea are broken in upon by several deep and broad fissures, extending in upon the table land upwards of three or four hundred yards, in whose hollows masses of stone are deposited, as if they had fallen there on the formation of the rents.

The rock is composed of coralline sandstone, and limestone; also plentifully mixed with fossil tubipora, with an appearance of horizontal stratification, but most commonly present only in huge tabular masses superimposed on a loose sandy basis abounding with disintegrated particles of limestone and mica, occasionally assuming a stratified formation, with the strata of different colors. Limestone with an earthy appearance resembling chalk, and detached pieces of gypsum, now and then occur, but no other geognostic formations are found.

In the limestone numerous oyster, cockle, lamprey, and a variety of other smaller shells are obtained—fossils coeval with the island's formation, which is Neptunian, and has by some convulsion of nature been raised from the bottom of the sea, at a period later than the primary formation of the continent.

Near a large tomb in the centre of the island, and facing the north on the side of the rocky hill, are two caves cut out in the solid stone. The largest excavation is about fifteen feet square, and eight feet high, once divided by pillars and arches into regular compartments, but now defaced by time. The other cave has a similar appearance, there being neither figure nor carving in either remaining, whereby the age when they were first formed might be guessed at. Besides these two caves, there are a number of smaller holes cut out in the rock, and in their immediate vicinity is an inscription roughly cut resembling the Pelvic character, which, with their general appearance gives them the stamp of antiquity. Ives supposed they were the habitations of the first settlers on the island: but it is very probable they may have been used for religious ceremonies by the priests of the Guebres, or fire worshippers.

The table-land is occasionally broken by ravines, and towards its northern boundary it becomes irregular and sloping, smaller mounds leading gradually down to the sandy plain. The soil formed by the disintegrated rock and the sand is tolerable, and might be cultivated if the slope was sufficiently extensive and regular. As it is, in many of the ravines are gardens, in which are fruit trees and vegetables, while in the clefts of the rock, vines are planted, enclosed by circular stone walls, which cause many portions of the rock to look as if covered with ruins.

The low part of the island possesses a sandy soil, mixed with particles of disintegrated rock, and capable when irrigated of producing crops; about one hundred acres are thus employed by the inhabitants, and during the cold season upwards of five hundred are cultivated, when the rains fall: the soil though meagre, is capable of great improvement. The beach is of small breadth, and rises somewhat abruptly from the sea, whose bottom is covered with coral rocks. Its sand is firm and intermixed with calcareous particles, by constant attrition formed into a variety of shapes, and dead shells, without pebbles either calcareous or quartz.

The inhabitants are degenerated Arabs, who live within the walls of the fort, which inclose a much larger space than is now required, even though many gardens are attached to the houses. Their occupation, besides piloting vessels up the river Euphrates, is fishing. They proceed to the banks of the Shat-el-Arab in the date season, and on their return cultivate the soil on Kargh, and the neighbouring Corgo, which is a low sandy island, about three miles long, and distant two miles from Kargh in a northerly direction, and uninhabited the greater part of the year.

The grains grown are maize, barley and wheat; brinjoles, radishes, beans, and gourds, are abundant, but fruits are scarce. A few grapes and water melons, can only be procured at times on the island, while every variety of fruit and vegetable, with other supplies are easily and cheaply obtained from Bushire and Bussorah. The botanical productions of Kargh are limited. I observed the date tree the banyan, *Ficus Indica*, the willow, the acacia arabica, the henna bush, the cotton plant, tamarisk, a species of *salsola*, *jowasa*, *bedysarum alhagi*, *coloquintida*, *cucumis colocynthis*, some of the common fruit trees of Persia, and occasionally on the rocks a few aromatic shrubs. The wood on the island is insufficient to afford a supply of fuel, which is brought in small boats from the neighbouring coasts.

Bullocks and sheep are fed on the island, but with the exception

of a few antelope, no quadruped exists in a state of nature. Partridges and quail are occasionally seen. Turtle have been caught on the beach, and fish is plentiful.

The supply of water is abundant and of excellent quality.\* It is obtained either by digging wells, twenty feet below the surface, or from long subterranean aqueducts, which extend often from the centre, or from one side of the rocky part of the island to the other. These underground channels were found by the Dutch, and were believed by them to be very ancient : they extend inwards often a mile in the solid rock, and holes circular and square are cut down upon them, from ten to fifteen feet deep to admit fresh air and light in order to permit the inhabitants to pass up, and remove any accumulations likely to choke them, and to raise the water. Their mouths are generally in a low arched cavern formed by nature, and it is not until some distance inwards that they exhibit art as having been had recourse to for their formation. It is, therefore, most probable, that these springs, having been discovered issuing from the rock, by the first inhabitants of the island, were followed up to their sources to insure a constant supply of water. Their courses are generally in a straight direction, and their beds run on a soft calcareous soil, the basis on which the coralline rock of the island is superincumbent, and which has been originally removed, for the construction of these aqueducts, so that almost invariably the rock forms their roof, down which places for the admission of air and light are cut. The stream from these springs is small but constant, and generally terminates in a large pool, outside the cavern in a ravine, whose hollow exhibits an abundance of natural vegetation, or is converted into a garden by the natives.

The climate of the island has always been deemed very salubrious. Sir John Malcolm in his History of Persia, says, "the island of Karack is very healthy, has plenty of water, and in some parts a good soil." The atmosphere is less moist than that of Bushire, indeed, so much so, that the depression of the moist bulb during the late hot season ranged during the day from  $6^{\circ}$  to  $17^{\circ}$ , and at times to upwards of  $20^{\circ}$ , while the maximum temperature seldom exceeded in tents  $94^{\circ}$ , and with cuscus tatties could be kept sometimes as low as  $76^{\circ}$  though the average indicated heat by the thermometer was about  $82^{\circ}$ , when a northerly wind prevailed: but the south wind being moist, with it, the same results did not uniformly ensue. The continued healthiness of the troops marks the island's salubrity.

\* 'The water found on all the islands in the Persian Gulf is good and sweet, while that on the coast of the mainland is uniformly brackish.' Horsburgh. Water, obtained from Bunder Abbas, I found to be an exception.

V.—*Journal of an Excursion to Sanaa the Capital of Yemen.*

By Mr. C. J. Cruttenden, I. N.

(Presented by Government.)

Owing to the sudden and unexpected death of my companion, Dr. Hulton, the task of writing this narrative has devolved upon me. I have, however, made use of his notes, and, if any remarks on the geology of the country through which we passed, are found in this journal, they are entirely his. I have only to regret, that the task has not fallen into abler hands, and that so interesting a country has not a more competent person to describe it, than myself.

The observations were taken chiefly by Dr. Hulton, and our latitudes agree very closely with those of the celebrated traveller Niebuhr. The longitude of Sanaa corresponds nearly with his also. It may be as well to remark, that owing to four years of drought, the country had assumed in many places, a much more parched appearance than usual; and though the tract we passed through looked luxuriant, yet we were told that after the rainy season, it would become still more beautiful.

During the time that the Palinurus was employed surveying Mocha roads, Dr. Hulton and I obtained permission to visit Sanaa, the residence of a Prince who formerly was acknowledged to be the most powerful chieftain in southern Arabia, and whose father had shown much attention to all English officers, who happened to visit his country. With the exception of M. Niebuhr, who was at Sanaa in 1762, I am not aware that any traveller has published an account of his journey.

Of the accuracy of M. Niebuhr's account we have every proof, and though, from the length of time that intervened between his visit and our's (in 1836), many of the towns are altered for the better or worse, still in his details of the manners, customs, dress, &c., of the tribes inhabiting Yemen, his description may be relied upon in every respect.

Having provided ourselves with Arab dresses and six stout mules, we left Mocha on the 13th of July at sunset, intending to travel across the Tehama by night to Beit-el-Fakih.

We had intended to take the southern route, but owing to the quarrels of two powerful tribes, that road was impassable, and in fact it has been blocked up for the last eleven years.

Niebuhr has so well described the Tehama, that any mention I may

make of it is almost superfluous. It is, as he describes, a long belt of sandy country, extending from a short distance below Juddah to Mocha. It however furnishes sufficient grain for the consumption of the numerous villages which are scattered over its surface, and receives the waters of several small mountain streams, which soon lose themselves in its sandy and arid soil. The inhabitants, generally speaking, are unfavorable specimens of the Arab; small in stature, and timid from not engaging often in war. The Bedouins or "Junglees" of the Tehama, are widely different from the bold mountain Arab, who, accustomed from his infancy to plunder, and frequently murder, looks down with scorn on the being who can dirty his hands in cultivating the ground, and bear the yoke of their Egyptian governors, without daring to resist their repeated acts of cruelty and oppression.

Our first stage from Mocha was to the small village of Rouez, about 14 miles, where we found quarters in a *serai*, or, as it is called here "Mekhaya." We were quickly provided with rude bedsteads, and slept in the open air. This is the universal custom in Tehama, and if the precaution is taken of covering the face with a light cloth no bad effects ensue from the exposure.

We were never questioned about our travelling inland, nor was the least notice taken of us. Our host presented us with our share of sour milk and jowaree bread, and made the same charges as he would to a camel driver, and saw us depart the following day without asking a question regarding our route.

We reached our next stage, Mooshej, on the following evening, and found the same accommodations as at Rouez. The country we had crossed was very uninteresting, being covered with coarse grass and stunted shrubs, as far as the eye could reach. We found Mooshej a tolerably large town, having two handsome mosques, and a population of perhaps eight hundred souls. One of the mosques is said to be the favourite resort of Imaum Ali, the son-in-law of Mohammed, who generally descends in an invisible form, but has been seen occasionally by a favored few.

The immediate vicinity of Mooshej, abounds in jasmine and a very beautiful flower called in Arabic "Kadeea," and in Hindostanee (as our servants told us) "Kaioura.\*" Both kinds of flowers are daily sent to Mocha. The Kadeea yields a fragrant oil, and the flowers of the jasmine divested of their stalks and strung on thread, serve to adorn the heads of the females, by whom it is highly prized. At this place we were taken for Bussorah merchants, and the clerk of

\* *Pandanus odoratissimus*.

the sheik demanded an inspection of our baggage, but an explanation immediately satisfied him, and we were left undisturbed.

The soil around Mooshej, though sandy and barren, is yet capable of producing tolerable crops of dokhun, (millet) jowaree, and two or three kinds of fruit. It is under the superintendence of sheik Hussein bin Sahya, a celebrated character, who, as an ally of Mohammed Ali Pacha, enjoys, unmolested, the town of Heis, and the country between that city and Mooshej.

Our next stage from Mooshej to Shurjah was long (twenty-eight miles, ) and fatiguing. The country, if possible, assumed a still more uninteresting appearance, and we passed but one hut on the road. We found Shurjah, or as Niebuhr spells it, "Scherdsje" a small village, nearly deserted, owing to the scarcity of water and fodder. The soil, however, about Shurjah, from its vicinity to the hills, is much richer, and between that village and Zebid, the country was cultivated for several miles without interruption. Want of water, however, had caused a failure of the crops, and the people were suffering great distress. For four years no rain had fallen, and this had raised the price of grain so high, that they could hardly find means of subsistence. The scenes of misery we had witnessed in Mocha, sufficiently attest this truth, and what with the famine, and the brutally oppressive conduct of the Egyptian troops, the inhabitants of the Tehama have reason to complain of their melancholy condition. The costume of the inhabitants here began to alter. The women wore large trowsers, drawn tight round the ankle, and both sexes wore conical straw hats, similar to those used by the slaves at the Cape of Good Hope. Our road from Shurjah to Zebid, was through a thick jungle of acacia and tamari-k trees. Numerqus wild guinea fowl were seen, but we shot only one. They were hardly worth the trouble of bringing down, their flesh being so tough. We crossed two large water courses, which on our return we found impassable. Niebuhr mentions "the beautiful valley of Zebid," but we did not see any thing remarkable in it, owing perhaps to the want of rain for so great a length of time.

On approaching Zebid, the ground becomes stony, and water is scarce ; there is only one small stream, which, however, never fails, and is I believe the only river in southern Tehama which reaches the sea throughout the year.

On our return from Sanaa, we found the town almost under water from the heavy rain which had fallen since our first arrival, and the road to Shurjah was impassable, in consequence of which, we were obliged to strike off at once to the coast at Kattaba. These sudden floods are not unfrequent, and the Arabs have a tradition that Zebid has



been three times washed away, and they point out an ancient mosque as the only building which has withstood the fury of the torrents.

We arrived here late at night, slept outside the walls, and entered the town on the following morning, where we found comfortable quarters and civil people. During the morning we were visited by two Turkish officers from the garrison. They were very inquisitive, and would not believe that we were travelling for pleasure ; at last, one asked us plainly if we were not going to make a treaty with the Imam, regarding the expulsion of the Egyptian army from Yemen. Of course we laughed at the idea, and they departed only half satisfied with the result of their visit.

From the circumstance of its walls and houses being of their natural dull brick-red color, Zebid wears a sombre appearance after the clean whitewashed buildings of Mocha. This idea is strengthened on entering the town, by observing the number of buildings in ruins. It has, however, a large and well planned bazár, which daily furnishes fruit and vegetables for the consumption of the inhabitants, and the Turkish garrison, consisting of four or five hundred men.

Two lofty, but plainly built minarets, point out the mosques of El Jamea and Wollecúlhah, the tutelar saint. Another large mosque, Wollee Shair, is situated at the S. E. corner of the fort, under cover of which, an attacking force might march to the very walls in perfect safety. Zebid has four gates, viz. Bab Koortub, Báb Sahum or Shahem, Báb Subáruh and Báb el Mukhel. On our arrival, an Arab from Abou Arisch, was Dolah ; but on our return we found him dismissed, and a Turkish officer of low rank (a Binbasha) in his place.

The trade of Zebid is inconsiderable. A small quantity of coffee is forwarded to Mocha by the Banians who reside here, and carry on an uncertain trade by the exchange of Indian goods for the honey, coffee, gums, &c. which the Bédouins bring down from the interior of the country.

Leaving Zebid at our usual hour, 3 p. m. we passed the large village of *Tooraibuh*, and the ruins of the village *Muhat*. At the latter place we saw several handsome tombs mentioned by Niebuhr, but the place is now deserted, and the coffee-house keeper was the only inhabitant. For many miles the country was flat and uninteresting, but on approaching Beit-el-Fakih the scenery improved, and the labourers merely waited for rain to ensure them an ample return for their toil. At 2 a. m. we reached our quarters at Beit-el-Fakih, after a stage of twenty six miles, and established ourselves for the day in a comfortable Serai.

Beit-el-Fakih is a large straggling town without walls, having some well built stone houses, and a fortress in the centre, called Hussone Othman, garrisoned by about three hundred Egyptian troops. The governor is an Arab, by name Almahr ibn Mohammed Haiduh, under the surveillance of a Turkish effendi.

It has three mosques, viz. El Jamea, Khorejahn, and Elmas; besides several handsome tombs in the neighbourhood.

This is at present the frontier town belonging to the Turks, and forms the grand emporium for the coffee, which is sent to Hodeida. The Banians have found their way here, and established themselves as merchants, but complain that, owing to the rapacity of the Turks, they can barely gain a livelihood.

Beit-el-Fakih is larger than Zebid, and, from not being walled in, has a more airy and cheerful appearance. It is, however, the hottest place on the Tehama, the thermometer standing in the shade at 102° Fah. We called upon the Effendi and were politely received. He took charge of our letters and gave us an introduction to the sheik of Senneef, a small village dependent upon Beit-el-Fakih, and our next halting place.

We were now about to leave the Tehama, and enter the mountains. As yet, during our six days journey from Mocha, we had met with no difficulty worth mentioning, and had never been insulted on the score of our religion, or tormented with questions regarding our intentions. In fact, I think that any Englishman may travel in safety through this country in his own costume, and suffer no more annoyance than we did.

At sunset we left Beit-el-Fakih, and striking across towards the hills, entered a thick jungle, said to be infested with robbers. We were enjoined to keep a sharp look out, and to have our arms in readiness. An hour, however, took us through this dreaded jungle in safety, and we entered a broad valley close to the foot of the hills: passing the village of Mahood Ali, we reached the foot of the mountains, and pushing our way up a narrow gorge densely wooded, we descended into the large and beautiful valley of Senneef. The scene was now changed: instead of the flat stony plain which we had found on the other side of the mountain, we were suddenly transported into a rich and fertile country, exhibiting extensive cultivation, and having many stately tamarind and tolak trees, growing along the banks of a small mountain stream. We arrived at our quarters at 2 A. M. and were civilly received by the Bedouin who officiated as host.

On the following day the sheik sent us a present of two sheep,

and called upon us soon after. I walked out to shoot some guinea fowl, and was accompanied by, at least, sixty men and boys who seemed to enjoy the sport much.

The scene strongly reminded me of India. Our party was increased by two Sanaa merchants, and the leader of a large kafia or caravan of camels, which was waiting a few miles further on. We were now to travel in the day time, the intricacy of the mountain passes not admitting of our journeying by night.

Passing along the banks of a water course, Wady Kholaba, we continued gradually ascending, by a narrow path, in many places so steep, that we were obliged to dismount. The scenery was very fine and the weather so cool, that we experienced no inconvenience from the sun. We found the country well cultivated, and passed several small villages built of stone. At 5 P. M. we reached Hajjeer, the frontier fortress of the Imaum's dominions, situated on the ridge of a lofty range of mountains. The coffee-house was built in the form of a castle, the interior having a square in the middle for the cattle, and surrounded by small cells, into one of which we crept, and, notwithstanding the fleas, slept very well.

Hearing that the sheik of the Beni D'thubabee tribe was in the house, we called upon him, and he promised us his escort to our next stage, Somfoor, where he would make us over to another chief. We accordingly followed him to the foot of the hill, where we found a large kafia, and an escort of twenty-five men. About seven miles from Hajjeer, we passed a strong hill-fort, called Hussone Duggera, where ten or fifteen men joined our party, as by their report, the country in the immediate neighbourhood was not safe.

Crossing a very large valley, called Wady Sehum, having a broad stream running through it, we reached Jibal Harráz, a lofty range of mountains abounding in coffee, and many kinds of fruit. Near this a desolate looking plain was pointed out as "Kubt-ibn Deran." It was said to be infested with robbers of the Beni Korah tribe, who are connected with the Beni Lam, bordering on the Asyr country. About two years ago a poor man happening to cross this place, was accosted by one of the Beni Korah, who observed something in his bag which was shaped like a dollar. Without hesitation he drove his dagger into the poor wretch's back, and then found that it was only the bottom of a coffee cup which had tempted him to commit so foul a crime. He did not however escape, for the neighbouring tribes assembled, and put him to death on the same spot.

We reached our halting place, Somfoor, about 5 P. M. and the Sheik kindly gave up the best hut to us, and sent us a sheep for

dinner. We here found a large kafia of seventy or eighty camels waiting for escort to Hodeida. The sheik fixed his own price, and leaving us in charge of a small party of eight or ten men, he returned to Hajeer. We halted the following day in the midst of the most magnificent scenery I had ever witnessed. The bottoms of the hills were thickly clothed with wood, above which a barren mass of white lime-stone rock reared its head. Our resting place was formed by a huge fragment of rock, which had fallen from the mountain, and formed a kind of natural cavern, large enough to contain twenty men.

Though great curiosity was shown, still no impertinence was offered, and they looked on with great gravity whilst we were dining. We were the more pleased at this, as, from the specimen we had seen of the Arabs on the coast in the neighbourhood of Aden, we had every reason to believe, we should be teased to death by their importunities for presents, and by their insatiable curiosity.

We found here a small coffee plantation, which we went to visit on the following morning, and were pleased to find it of the best kind. The shrubs averaged seven feet in height, and the branches were thickly studded with fruit. The plant requires the soil around its roots to be moist, though apparently it does not want much rain. It is always found growing in the greatest luxuriance in the vicinity of a spring, and in plantations where water is scarce, it looks dry and withered. We were assured by the Arabs, that the plant is watered regularly morning and evening—and that it takes three years to arrive at maturity. We were told that a good bush of the *Oudanee* sort, standing about eleven feet high, ought to produce twenty-eight pounds of coffee yearly.

The coffee is transported in December and January to Sanaa, from the surrounding districts. It is divided into seven classes, as sherjee, the best; oudanee, the largest, &c., From Sanaa it is carried to Mocha and Hodeida, but since the Turks have taken possession of the Tehama, the merchants have been afraid to send large quantities, and consequently the coffee market in Sanaa is much overstocked. The merchants clear at present three and half dollars on every camel load; the total expense of transporting it to the sea coast amounting to forty-four dollars.

The coffee plant is found usually growing near the sides of any valley or other sheltered situation in soil which has been gradually washed down from the adjacent heights, produced by the decomposition of a species of claystone, which is found associated with trap-rock, amongst which, as we approached Sanaa, basalt is found

to predominate. The claystone is only found in the more elevated districts, but the detritus finds its way into the lower country by the numerous steep gorges which are conspicuous in all directions. As it is thrown up on one side of a valley, it is carefully protected by means of stone walls which present the appearance of terraces.

In these plantations, several fruit trees, as the plantain, almond, &c., are found; and occasionally small patches of Indigo. Leaving the coffee plantation at Dora, our road lay through a winding and difficult pass, in many places built up in flights of steps, which opened into the broad and beautiful valley of Seyhan, where we found barley, oats, Indian corn, and jowarree, growing in the greatest luxuriance, and watered by several small mountain streams and wells. We slept at a village called Mofakh, situated on the summit of a small conical hill, and almost impregnable by nature. Our quarters were at the foot of the hill in a stone building, called here a *Simsevak*, and answering to the Mekhaya or coffee house of the Tehama. It was divided into three compartments by arches, the centre forming a stable for our animals, and the wings elevated about four feet, serving as sleeping places for ourselves. *Mofakh* is one of the market towns, and it may be as well to remark here that in the Imam's dominions, there are markets held every day during the week at particular villages. Harjeer being the Sunday market; Senneef the Monday; and so on. By these means, goods from the sea-coast are rapidly conveyed through the country, and corresponding returns find their way to Mocha and Hodeida.

Fruit forms a principal article of food for the poorer classes, and during our stage from Dora to Mofakh, we frequently found people sitting by the road side with baskets of grapes and apricots, and a pair of scales. The night at Mofakh, was bitterly cold; the temperature of the water in a spring, close to the house was 62°. At this place we found another coffee plantation of the oudanee sort, but owing to the scarcity of water, the trees looked parched and languid.

Crossing over a very hilly country, rather more barren and stony than any we had before seen, we slept at the village of El Houthein, and passing through the small hamlet of Komiss, we reached the village of Muttinah in the afternoon of the second day, from *Mofakh*; here we despatched a messenger to Sanaa to request permission to enter the city, and to advise our agent of our coming. Our last stage had been most interesting. From the steepness of the mountain sides, no grain could grow on them. The inhabitants had therefore to cut away the ground, so as to form a series of terraces,

on which corn, barley, &c., flourished, and in the midst of which were scattered numerous small hamlets, looking clean and white, with their separate mosques and tombs. I counted upwards of one hundred and eighty of these platforms in regular succession, and the appearance of the valley, which formed a magnificent amphitheatre, was most striking. As we approached Sanaa, the country became more stony and barren, and the character of the hills altered; and here it may be as well to subjoin a few remarks on the nature of the ranges of mountains over which we had passed.

The hills about Senneef are not high, and seem to be composed chiefly of trap of various kinds. The same formation prevails as far as Somfoor, where the structure of the rock becomes more crystalline, and partakes of the character of granite. Here the hills assume a remarkably varied appearance, stupendous masses are heaped one on the top of another, to an enormous height, and others have rolled down of such dimensions as almost to obstruct the road through the valley. One of these forms the resting place at Dora. Near Mofakh this rock disappears and a mixed rock now prevails, containing a large proportion of hornblende, argillaceous matter, and quartz. From El Houthain the clay predominates, and from this bed it would seem that the chief part of the soil deposited in the valleys is washed down. After surmounting the lofty hills beyond Kāmiss, the country becomes less mountainous, and the rocks appear to be of a volcanic nature, large masses of cellular trap and scorix lying scattered upon the plain.

At the small village of Boān, we saw the first bridge that I had ever crossed in Arabia. It was perfectly well built of hewn stone, and though in any other part of the world a bridge would be no curiosity, I may venture to say that it is so in Arabia.

Mutnah was the most uncomfortable halting place we had visited. The night was too cold to admit of our sleeping in the open air, and vermin of all kinds, which swarmed within, equally precluded all possibility of sleeping in the house.

On the following morning we started early, and, passing over a barren tract of land of some miles in extent, suddenly came in view of the valley and city of Sanaa—fifteen hundred feet below us. Descending rapidly we soon reached the walls, and followed by a great crowd, entered the suburb of Bir el Asab, where we were met by our agent, who escorted us to a dwelling prepared for our reception, and assured us of the good feelings of the Imaum towards Englishmen in general.

Having refreshed ourselves with fruit and coffee, we wished to

go out, and stroll about the quarter in which we were residing, but to our chagrin, we found that to show ourselves outside, before we had had an audience of the Imaum, was contrary to the etiquette of the court of Sanaa, and the gates were locked upon us. Knowing that the same thing had happened to Niebuhr, we were much amused at first, but soon got tired of waiting, and endeavoured to elude the vigilance of our host. He however so forcibly pointed out the danger he incurred, that we gave up our point. On the following morning, the Vizier came to see us, and examined the presents which we had brought for his Highness. As soon as it was found that we really were English, and not dangerous, we were formally welcomed to the city of Sanaa in the Imaum's name, and directed to accompany the Vizier to a residence prepared for us in the Imaum's gardens. Shortly after our arrival at our new domicile, we were sent for by the Imaum, and passing through the gardens, found ourselves in a magnificent saloon, at the end of which sat Ali Munsoor, the reigning prince, with his uncle Seede Mohammed, or the "Saif el Khalifa" standing on his right hand. After shaking hands, we were accommodated with chairs, and after a few trivial questions, the presents were produced and graciously accepted. The Doctor felt his Highness' pulse, and promised medicine. We were then told that we might "retire, and live in safety in our house, as we were Englishmen and his brothers." Ali Munsoor is a young man, perhaps twenty-four years of age. From his mother, who was an Abyssinian, he has a very dark complexion, and a cast in his eye gives his countenance a forbidding expression. He was dressed in a crimson silk robe with a white turban, wound round a flat gold cloth cap, and a dagger studded with jewels. His uncle, Saif el Khalifa, or sword of the Khaliph, wore a most superb dress of flowered silk, and a white camoleen crossed with bands of gold thread.

On our return we were besieged for "Bucksheesh" by eunuchs, grooms, servants of all descriptions, and about twenty old women. We were much surprised at seeing these ladies in our house, but on inquiry we found that they were the cast off women of former Imaums, and were allowed to pass the rest of their days in the pay of the Imaum. Without their interest we were told, no person could obtain an audience of his Highness, and this we found is really the case, for whenever we wished to see the Imaum, we had first to secure the good wishes of these old ladies, by tendering a dollar or so, which was always graciously received.

Drunkenness seems to be the prevailing vice amongst the higher classes in Sanaa. Twice we were at the private apartment of the

Inaam, and each time we left perfectly disgusted. The Imaum with five or six dancing and singing girls, got shockingly drunk, and he seemed surprised at our refusing to join him in drinking raw spirits. The liquor is made in Sanaa, and tastes like bad whiskey. His Highness when in his cups, became so excessively liberal, that he desired us to look round, and take any thing we liked. We seized this opportunity of requesting unlimited leave to walk about the town, and neighbourhood, and in fact to do as we liked. All was instantly granted, but unfortunately his Highness was too tipsy to recollect his promise. On the day following this we managed to get out, and discovered on the walls of some houses several inscriptions in the same character as those at Hussone Ghoráb, a copy of which is annexed. We were the more pleased, because Niebuhr could not discover any. We were told that these stones were brought from the ancient city of Mareb, situated N. E. from Sanaa seven days' journey. On inquiry, we found that the country round the ruins of Mareb was called "Urd é Saba" or the land of Saba. We were assured that after the rains, square pieces of gold coin are found, and many inscriptions in the same character, cut in marble. Statues and broken columns are also numerous, and I luckily secured a marble head of a figure which originally stood about three feet high, in the gardens of the Imaum. Our determination was instantly formed to reach this point, but unfortunately Dr. Hulton's health began to fail, and he soon became dangerously ill. Unwilling as we were to lose this very interesting trip, we found ourselves compelled to do so, and hope for some other opportunity at a future time. That the "Urd é Saba" is the ancient Sabaa seems pretty certain. We are aware that Christianity was early adopted in that part of Yemen, and we were *voluntarily* told by several well informed men, that stones were frequently found having on them the representation of "a woman holding a child in her arms" and that the "child had something round its head like a star !" We offered high prices for any specimens either in stone or coin, but the season was over, and we were unsuccessful. It would doubtless prove a rich field for the antiquary, and it is possible to get there by paying for an escort. We had agreed with an Arab sheik to take us, but I have already stated the reason we did not go.

The inscriptions which were procured, agree in character precisely with those we found at Negeb el Hadjer. They were at first supposed to be the ancient Hamyaritic, but have since been supposed to be Ethiopic, which would make them not so ancient. The charac-



fers are perfectly plain, and in good order, and, with the exception of the stone being chipped round the edges, are almost as plain as when first cut. We were repeatedly told that in the neighbourhood of Mareb, such inscriptions were so numerous that we "could not copy them in a month." The bigotry of the Arabs induces them to destroy any thing they find which approaches to idolatry, and, in consequence, I only succeeded in procuring the head of a figure, which I was assured, had been perfect but a few months before.

The Imaum has two palaces in the city, one the Bistanel Mutwukkil, and the other the Bistan el Sultaun ; and he resides in them alternately. The Bistanel Sultaun is, if any thing, the finer building of the two, and of more modern construction, but both are mentioned by Niebuhr. Both are much superior to any thing of the sort I have ever seen in Arabia, and at a distance they would be termed almost magnificent. They are surrounded by extensive gardens, and the apartments in the lower or ground floor are mostly large saloons, very splendidly furnished, and having a large basin and fountain in front, with perhaps twenty jets of water to the height of thirteen or fourteen feet. Our residence in the "Bir el Asab," was remarkably pretty ; it consisted of four rooms composing a hollow square, in which was a fountain overshadowed by an immense vine loaded with grapes. All four rooms opened into this square, and were fitted with cushions, carpets, &c. and the never failing stand of seven or eight hookas. The house itself was completely hid from the public street by a number of large walnut and apricot trees.

The people of Sanaa never use the coffee bean, but employ the husk which they call "Kishr," and which is prepared in the same manner. I had frequently before tasted this preparation in the Tehama, but never enjoyed it so much as in Sanaa, where it was of the finest quality, and formed a most refreshing beverage after a day's fatigue. The natives say that the bean of the coffee is too heating, and is liable to throw a person into a fever ; but, like many others when advocating the use of their favourite beverage, they declare that the coffee husk or "Kishr" is an infallible remedy for all disorders.

For four years previous to our visit, as before stated, no rain had fallen, and as this was the month in which rain usually falls, the people were very anxious about it, and we were requested by the Imaum to look at the stars with our instruments, and inform him when the wished for showers would fall. As we had experienced much rain a day or two previous to our arrival at Sanaa, and the wind still

hung in the same quarter, the Doctor boldly declared that in forty-eight hours or less rain would fall. As luck would have it, before six hours had elapsed, a very heavy shower of rain came on which lasted all night, and during the time we were in Sanaa, scarcely a day passed without occasional showers. The four years of drought had caused a complete famine in the land, and raised enormously the price of every article of provisions. I have a statement showing how the prices of the common articles of daily consumption rose, and from this, the distress of the labouring classes may be conceived. Whenever we went out of our house, we were assailed by a mob of famished wretches, who, finding no relief from the charity of a Musulman, condescended to beg from an unbeliever; and in passing through the streets, the bodies of men, women, and children, lay here and there, without any body offering to bury them. The only remark made by a wealthy merchant, who was walking with us one day, was, "What can I do? It is God's will, and we bow to it." The object that excited this remark was a poor woman, whose husband and two infant children were lying beside her starved to death, and who was vainly endeavouring to excite the charitable feelings of the passers-by, to give her family a decent burial. On our arrival here, at least one hundred and fifty funerals passed through the gates every day, and I may safely say that of these, thirty were caused by starvation. Some of the merchants wishing to be considered charitable, regularly fed thirty or forty people, as they said, but it turned out that all the food they gave, was *over ripe fruit*, chiefly grapes! On our arrival, Sanaa was very unhealthy, and Dr. Hulton's opinion was that the climate was much too dry to be healthy. The rain that fell during our stay stopped in some measure the ravages of the fever, but the Sananees themselves said, that this part of Yemen is much too dry even for their constitutions. I enjoyed excellent health, but my friend fell a victim to the baneful influence of the climate after a lingering illness of six weeks.

Coffee will not grow in Sanaa, though the experiment has frequently been tried; it appears either that the climate is too cold, or the soil is too rich. Fruits of all kinds, however, grow here in abundance. Amongst these we noticed grapes, almonds, figs, pomegranates, plums, apricots, peaches, a small kind of pear, plantains and walnuts. The rich householders have large vineyards, covering perhaps an acre of ground, where the vine is supported on a trellis work about four feet high. From a small white grape called "el Baitha," they make tolerable wine, and they also distil

a kind of spirit from barley. Fruit appeared to us to form the common food of the lower classes. Grapes were daily exposed in large quantities for sale, and the venders were commonly Jews, who chiefly supply the market, and are besides the best artisans in the city.

There are several Banians in Sanaa, one of whom, considered the chief, annually pays a tribute of one hundred dollars to the Imaum, and thirty dollars to the support of the mosque. On the death of one of this class, half his personal property goes to the Imaum, and the other half to his heirs or partners. They trade largely with India and are esteemed rich.

The Jews form another important branch of the population of Sanaa. In Niebuhr's time, the town they resided in was separated from the city, but it is now included within the walls of the Bir el Asab. They are the chief workers in gold and silver ornaments, and, in fact, are almost the only artisans in the place. We went to their synagogue on their Sabbath, and were shown a very beautifully written copy of the law on a scroll of leather. Their women were the most lovely I almost ever saw. The total number of the Jewish population may be about 4000.

The people of Sanaa are of the Zeidee sect, chiefly differing but little from the Sheeas, or followers of Ali. They are of course as bigotted as other Moslems, but nevertheless frequently engaged in a good humoured dispute with me about our religion. We were invariably treated with the greatest hospitality wherever we went, and had never to complain of any insult offered by the populace. Unfortunately our agent was a rascal, and when he found that we would not be subservient to his wishes, he privately told the Imaum, that we ought not to be allowed to walk about the city copying inscriptions, and sketching houses, and, in consequence, we were detained in our house for six days, when luckily the Imaum feeling unwell sent for the Doctor, from which time we were again at liberty. But we unfortunately were not able to profit by our newly acquired freedom as much as we desired, in consequence of Dr. Hulton's illness.

The city of Sanaa is situated in a deep valley perhaps seven miles in breadth, and twenty or thirty miles in length, bounded on the east by a lofty mountain called Jibal Nieggum, and studded all along with large villages. We visited two of these, viz. Roatha and Waddy Dtharr. Their population may amount to one thousand five hundred each; and we considered that thirty thousand would not be too much for the city of Sanaa. Taking these towns and the numer

ous other hamlets which are scattered over the plain together, I do not think there would be less than seventy five thousand souls. The houses are all tenanted, and unlike other cities, such as Aden, &c. Sanaa is still as populous as ever, though owing to the negligence and apathy of its governors, it is fast verging to its fall, and will be an easy prey to the enterprising Egyptian army now in Yemen.

Within two days journey from Sanaa, iron ore is found, which is worked up by the Jews into swords, &c. it is however too soft, and a stroke of an English sword would almost cut in two any Sanaa weapon. Saltpetre is also found in Waddy Dtharr with which the Bedouins manufacture their own gunpowder. Marble is found at a place about seven miles distant, called Hussone Baresh; also a kind of chunam, superior to that made in India, which is used to whitewash the interior of the houses. With the exception of a thick kind of cotton cloth, there are no manufactures in Sanaa. The Bedouins weave a coarse species of Camoleen or "Abba," similar to those used in Socotra, but all other piece goods are brought from India in exchange for coffee. In ordinary years, rain falls in Sanaa three times: first in the latter end of January, but in very small quantities, and frequently none at all; secondly in the beginning of June, when it falls for about eight or ten days; at this time the seed is sown, and the cultivator looks forward to this season with great anxiety. Thirdly, at the latter end of July, when it is in the greatest abundance. A few farmers defer sowing till this period.

In July, the N. E. wind prevails during the day, but declines in force towards the afternoon; it is met by a current of air from N. W : lightning, thunder, and rain generally follow.

After rain has fallen for three or four days, the mountain torrents rise with great rapidity, and become formidable obstacles. On our return we experienced the effects of one of these sudden rushes of water; our mules were washed off their legs, and the horses were barely able to stand against the current. In the Tehama particularly, the face of the country is changed in an inconceivably short time. The fields being surrounded by dykes, they each form large pools of water, and Zebid in particular was almost inundated; the road between that place and Mooshej was impassable. Such however, is the sandy nature of the soil, that forty-eight hours is sufficient to restore every thing to its former parched appearance. And the grass has scarcely time to shoot, before it is again burnt up by the heat of the sun.

Regarding the provinces in the neighbourhood of Sanaa, we could

not gain any precise information. The authority of the Imaum, however, does not extend two days journey to the N. W. and the people are generally hostile to him. The Imaum has not more than 2,000 fighting men in his dominions; but when engaged in war, he calls in the assistance of mercenary troops.

The country to the south of Sanaa, as far Aden, formerly belonged to the Imaums of Sanaa, but the inhabitants now set him at open defiance; and it was his intention to collect an army to chastise the rebels, when his plans were stopped by the appearance of the Turkish army. Two very powerful tribes, the Do-Mohammed and Do-Hussein, living in the southern part of Yemen, would be sufficient to check the progress of the Egyptian troops, were the former only reconciled with the Imaum. A debt of 1,50,000 dollars is the cause of the rupture between the former Imaum and these powerful tribes, and the late conduct of the reigning prince, in endeavouring to seize his uncle, has widened the breach. Owing to some fancied conspiracy, the Imaum sent orders to seize the person of his maternal uncle, Seede Gassim, and confined him in the state prison. He, however, escaped by night, and took refuge in Taes with the Do Hussein. Here he assumed the name of El Hadi, and, as the people of Yemen have a legend that El Hadi is the name of the reviver of their religion, they flocked to his standard in great numbers. He sent to the Imaum during our stay, and demanded of him to "resign the seal of the Imaum," but not thinking himself strong enough to attack Sanaa he was making overtures to the Turkish governor of Mocha, when we sailed from that place in September, 1836.

That the Egyptian troops will eventually take Sanaa, there seems to be little doubt, but I do not think they will be able to remain there, for the walls of Sanaa are so extensive that, it would require an Army of at least 15,000 men to defend the place against the continued attacks of the Bedouins. Neither could they obtain a sufficient quantity of provisions. The prevailing opinion, when we left, was, that Mohammed Ali would establish the present Imaum's uncle Seede Gassim as governor, and content himself with an annual tribute. Great preparations were making at Hodeida and Mocha for the total subjugation of Yemen, and their success seems pretty nearly certain: still, were the Imaum to call in the neighbouring tribes to his assistance and *pay them well*, there might be a chance of defending his country successfully against these invaders.

Dr. Hulton's illness detained us at Sanaa for nearly five weeks. At the expiration of that period, through the kindness of a merchant

I procured a litter for him. The Imaum sent for me previous to our departure, and after regretting the illness of Dr. Hulton, presented us with two young horses, and bid us adieu. We returned by the same route to Mocha, and arrived there in fifteen days.

In apologizing for the brevity of this paper, I may be permitted to remark, that after the illness of my friend, my time was so constantly taken up in attending him, that I rarely moved out of doors. I have no hesitation in saying, that Yemen, and particularly the north eastern part of it, would prove a most interesting field of discovery. And, in conclusion, I can only regret that I had not more time to explore the country, and that I was deprived of the assistance of my friend in drawing up these hasty remarks.

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VI.—*Note on Perim Island in the Gulf of Cambay.* By Lieut. R. Ethersey, I. N.

Perim island, situated in the Gulf of Cambay, is in latitude  $21^{\circ} 35' 19''$  N. longitude  $72^{\circ} 34' 45''$  E. It is one thousand eight hundred yards long, and from three to five hundred yards wide, lying N. N. W. and S. S. E.: bears from Gogah  $39^{\circ}$  E. distant four and a half miles, and lies two and a half miles off shore. It is a singular island surrounded by an extensive rocky reef, which on all sides, except the south, is steep; eleven and twelve fathoms water, in several parts, being within five and ten yards of the rocks forming the reef.

At low water spring tides, the channel between it and a rocky reef in the centre, is only one thousand two hundred yards wide, and has an extraordinary depth of three hundred and sixty feet, the bottom yellow clay. Due west of the light there is two hundred and forty feet, and to the northward of the deepest part of this channel, which is N. N. W. of the island, the depths gradually decrease to one hundred and eighty feet due west of the north end of the reef. On the S. E. side of the island there is a depth of one hundred and ninety-eight feet within three quarters of a mile of the reef, which decreases towards the north to one hundred and sixty and one hundred sixty-eight feet, rocks, and rocks and sand.

It has been surrounded by a strong stone wall, a part of which is still visible on the western side, and the ruins of it are apparent all round; in that part which stands on the western side, there is a doorway, composed of large well cut stones, and is very similar in appearance to that on the island of Shalbet. There are some ruins immediately inside this door-way, which are nearly buried beneath the

loose sand; at the N. N. W. end there are also some other ruins, but not extensive. Half way between the light and the N. N. W. end, there are the remains of a tank, which from the side which still stands, appears to have been well built, but of no great extent.

The light tower stands on a high sand hill, and is composed of solid masonry; is twenty-six feet high, out of which rises a spar sixty feet, upon which the lanthorn is shipped, the whole being supported by shrouds. The light consists of eight burners, and is one hundred and two feet above high water mark. Hills of sand line the west side, and both ends of the island; general height from twenty to forty feet. The S. E. side is low and covered with a little vegetable mould mixed with stones, which admits of cultivation, although on a small scale.

Besides the lascars belonging to the light establishment, a number of coolee families reside here during great part of the year; they have a few cattle and goats, which find a scanty subsistence about the low grounds

The island is composed of tertiary strata; the S. S. E. end terminates in a cliff which exposes horizontal beds of puddingstone, which are separated by sandy clay; the order of superposition is as follows, commencing from the surface.

	Ft.	In.
Reddish mould mixed with stony rubbish.....	3	0
1 Yellow puddingstone .....	1	6
2 Sandy clay.....	1	0
3 Dark coloured puddingstone .....	0	6
4 Sandy clay.....	4	0
5 Yellow puddingstone .....	1	0
6 Sandy clay.....	0	6
7 Recent sandstone.....	0	6
8 Sandy clay .....	8	0
9 Yellow puddingstone .....	1	2

At high spring, the tide flows above the last stratum. None of the beds appear to dip, and none preserve an uniform thickness throughout the cliff, and in one part, the sandstone disappears altogether. Figure 3. is a section of an angle of the cliff; the strata in the same order and thickness as above, which were measured at this part; the numbers refer to the specimens which accompany this.\* This part appears to be an elevated mound, as no appearance of rock is to be seen on the other side of the sand hills, although

\* In the Society's Museum.

they are not more than from eighty to one hundred yards wide, which appears more probable from the circumstance of a well having been dug at the foot of the hill, on which the light house stands, at an elevation of eight or ten feet above high water mark, and no rock was met with until twenty-three feet had been excavated, through sand and sandy clay, when a stratum of puddingstone was cut through, which was three feet thick, when water immediately flowed. The section (Fig 2). of the S. S. E. end of the island in a line E. N. E. and W. S. W. will give a better idea of my meaning. •

On the dry reef which surrounds the island, no regular strata are discernible, the whole being confused heaps of rock mixed with mud, sand, and clay; the rock is chiefly yellow puddingstone (breccia) in which, on the S. E. end of the island, most of the fossil remains were found. There is one exception however to this, which occurs on the western side of the island, where at low water spring tides, I observed a regular horizontal stratum of yellow and a reddish yellow clay, extending nearly one mile to the southward. In one part, this rises into a cliff eight and nine feet high, but in general it only shows itself a foot or two above the water. No. 10 and 11 are specimens of the cliff, the face of which is curiously marked by curved lines, and is full of little excavations, apparently the work of some testacea. About two hundred yards to the north of this cliff, there are several large blocks of rock, of which No. 12 is a specimen; the top of the highest of these is on a level with the top of the cliff, and as they rest upon yellow clay, it is probable they are not in the position they originally occupied. Fig 1. is a view of the cliff from the westward. No. 14 is a specimen from a small reef on the opposite side of the channel, the whole of the rock resting on yellow clay, proceeding across to the main. No. 4, 13, and 14, are the rocks met with, lying in confused broken masses, mixed with clay, sand, and mud; no regular strata to be seen, and the rock disappears altogether above high water mark. The coast is lined with sand hills. I examined several small water courses inland but could not discover rock.

There are large rocks in twenty-eight and thirty fathoms on the E. and N. E. side of the island, but I have never been able to procure a specimen. The upper part of the clay cliff, of which Nos. 10 and 11 are specimens, is twenty feet from the lower part of the stratum of puddingstone, No. 9 of Perim Bluff.



. LIST OF MINERALS REFERRED TO.

- |   |   |
|---|---|
| 1 Conglomerate, composed chiefly of quartz, sand, and pebbles, united by a clay basis.    | 10 Laminated clay.  |
| 2 Saliferous soft sandstone.  | 11 Laminated clay.  |
| 3 Puddingstone.   | 12 Not received.  |
| 4 Breccia.  | 13 Coarse sandstone or granular quartz rock, highly ferruginous.  |
| 5 Sandstone (fine grained).   | 14 Conglomerate, composed of broken marine shells and quartz pebbles, imbedded in an argillaceous cement. |
| 6 Conglomerate, nearly the same in composition as No. 1. with the pebbles of larger size. |   |
| 7, 8, and 9, not received.  |   |

**VII.—*Illustrations of the Arab and Persian Geographers, or the Geography of the Middle Ages.* By James Bird, Esq.**

The anarchy and decay, which divided the government and weakened the institutions of the Roman empire, made easy the conquests of barbarians from the north; who, in the fifth century of our era, overran the fairest countries of Europe, destroyed their civilization, and extinguished the light of literature and science. Geography shared in the darkness which overspread other departments of letters; the magnificent library at Constantinople was destroyed by conflagration; and the knowledge of ancient geography, which, from a survey of the Roman possessions, embracing their military roads and provinces, had augmented with the extent of the empire, almost became extinct. In the seventh century, the Khalif Omar, having ordered the Alexandrine library to be burned, completed the reign of ignorance which commenced with the Goths and Vandals. It continued till the middle of the eighth century, when the Khalifs of the house of Abbas, moved by an ardent love of science and literature, founded the city of Baghdad, to which the learned men of all countries flocked to experience the protection and favor of this noble race of Mohammedan Sovereigns; and while their munificence called forth the talents of their countrymen, it drew to it the learning and the genius of other nations. About A. D. 754 the Khalif Al-Mansur, second of this house, introduced a taste for Astronomy. Ptolemy, the greatest of Roman geographers, who had collected and improved the knowledge of the latitude and longitude of places, bequeathed him by Eratosthenes and Hipparchus, was soon after

translated from Greek into Arabic: a mutilated copy of which work, known by the name of *Al Majisti*, exists in the library of the late Mulla Firoz of Bombay. But, before proceeding to illustrate Arabian geography, it is necessary to say a few words regarding the Arabic geographical treatise, named *Masalik-wa-Mamalik*, or routes and kingdoms, which was some time ago presented to the Society by Sir Alexander Burnes. For the better understanding also of the extent of geographical knowledge in the middle ages, it is essential to give some account of the Arabic geographical system, and to translate entire the very curious preface to the work of Masudi, called *Muruj-az-Zahab-wa-Muadin-al-Jawahir*, or the meadows of gold and mines of jewels. Previous to proceeding to the geography of particular countries, and the illustration of the *Masalik-wa-Mamalik*, I will in future papers follow the plan now proposed.

#### THE GEOGRAPHICAL WORK CALLED MASALIK-WA-MAMALIK.

In a former number of our proceedings, there is a note stating that this work, which is in Persian, had been 'compared by me with Sir William Ousley's translation called the Geography of Ibn Haukal, and found to be precisely the same. At the end of the copy it is said to be a translation from the Arabic, by Abu Mahasin Mohammed Saad; the original author of which is, according to Moeller's catalogue of Oriental Manuscripts in the library of the Duke of Sax Gotha, \* named Abu Ali Ishak, the judge of Istakh-ar, commonly known by the name of Istakhari. The work is otherwise known by the title of *Kitab-al-Akalim*, or the book of climates, and the author is mentioned in the cosmographical work of Zakaria-bin-Mohammed, commonly called Kaswini. He appears to have flourished H.ej. 244, A. D. 858, and preceded Ibn Haukal who borrowed from him. In the preface to the present translation it is said, "thus speaks Mr. Ishak, that our desire, in composing this book, is to bring to recollection all the countries of the world which have adopted the faith of Islam; and we have so divided it as to embrace in each climate every known town; and whatever regarding the cities, the environs, the hills, the rivers, the seas and the deserts, may be found in each climate, has been detailed, and everything unnecessary left out. We have arranged this book

\* *Catalogus librorum tam manuscriptorum quam impressorum qui jussu Divi Augusti Ducis Saxo Gothani, a beato Seetonio in oriente emti in Bibliotheca Gothana asservantur, Auctore J. H. Moellero, Appendix Particula Prima, page 8.*

after the manner of the seven climates, &c and have called it the *Masalik-wa-Mamalik* ”

The name *Masalik-wa-Mamalik*, seems to signify an universal geography, and was applied to the celebrated work of Edrisi the Nubean Geographer. Masudi also says that it was the title of a work by Abdallah-bin-Abdallah, commonly called Ibn Khurdadbah, of whom he thus speaks; “ He was the best of compilers and the first of authors, as those who wrote after him followed his example and quoted his authority. If you are anxious to investigate this subject, look at his great historical work which contains more matter than any other history whatsoever, and surpasses all in arrangement and science. It embraces an account of the different tribes of Ajam, or those not born in Arabia; but one of his best works is the *Al-Masulik-wa-Mamalik*, which if you seek after you will find, and will approve of if you can judge.”

A variety of works named *Masalik-wa-Mamalik* appear, therefore, to have existed, the authors of which probably copied from each other, and gave by their extracts a similarity of character to the whole. This has induced Sir William Ousley to think that the work translated by him was that of Ibn Haukal. The original author, however, appears to have flourished towards the end of the eighth century, and this opinion is corroborated by a fact, mentioned in the manuscript, that during his time, Andalus, or Spain, was governed by Al-Hakim, the son of Abd-ar-Rahman the son of Moavia, who conquered it in the beginning of the Khalifat of the Abbasides. He also says that at this time the Abbasides had not yet read the Khutbah in their name.\* It is not likely that Ibn Khurdadbah was the original compiler, as his age is usually placed in Hej. 300, or the beginning of the tenth century, and the whole of the evidence is indeed in favor of the correctness of Moeller's opinion, that Al-Istakhari was the author.

In the commencement of the work the design of it is detailed, and begins from Arabia, where is situated the holy Kaaba, called the navel of the world, in imitation of the Greeks, who assigned similar honor to Delphi. The sea of Persia, the western countries of Africa, Egypt, Syria, the Mediterranean ocean, Mesopotamia, Khuzistan or Susiana, Fars, Mansurah, Sind and Hind, Azerbijan, Kohistan, Dilman, the sea of Khozar or the Caspian, the various nations surrounding it, the deserts between Khorasan and Fars, the provinces of

\* This is a prayer for the reigning King read every Friday in the principal mosques.

Sistan, Khorasan and Mawar-an-Nahar, with all the countries where reside true believers, are next described. The copy forwarded by Sir Alexander Burnes, appears in many parts more full and correct than the one from which Sir William Ousley must have made his translation; and in illustrating the geography of particular countries, I will avail myself of its information where such seems more detailed.

Only the eastern and northern parts of Africa are noticed, and as little information is given on the state of Europe or India, I will, in these illustrations, have recourse to the works of Masudi, Ibn Al-Wardi, the Sherif Al-Edrisi, the Maajam-al-Baldan, the Nafha-at-Tib of Shaikh-Shahab-ad-din Ahmed-al-Muckri, and the tables of longitudes and latitudes by Nasir-ad-Din Tusi and Alagh Beg.

#### ACCOUNT OF THE MOST CELEBRATED OF THE ARAB GEOGRAPHERS.

The Khalif-Al-Mansur, first among the Abbasides who dedicated himself to science, became equally skilful in the laws of his religion, as in philosophy and astronomy. Under his auspices works on various subjects were translated into Arabic from the Syriac, the Coptic, the Greek, and the languages of India and Persia. At this time the astronomer Mohammed-bin-Ibrahim Alfazari flourished, and though astronomy was before known to the Arabs, it made great progress under the patronage of the liberal princes who gave celebrity to this noble house. When the sceptre of the Khalifat descended to Al-Mamun, the seventh of this race, the knowledge of this science was carried to yet greater perfection; and the Khalif, determined to seek knowledge in her native haunts, requested that the kings of the Greeks would send to him such philosophical books as they had amongst them, and having sought for skilful interpreters, he caused them to be accurately translated. His father Harun-ar-Rashid, during his life time, had assigned to him the countries of Khorasan and Mawar-an-Nahar, which he governed as vice-royalties. At his succession to the undivided empire, A. D. 812, being still attached to these countries, he made Tus (now Meshid) his capital, and place of his residence. It thus became the rival of Baghdad, and the resort of many learned men.

Among the astronomers who flourished at this time, was the arithmetician Habash Marwazi, a native of Baghdad, who wrote three books of astronomical tables; of which the first was composed, accord-

ing to Abul Farij,\* after the rules of the *Sind-Hind*, a book mentioned by Masudi; the second, named *Al Mumtuhin* embraced the result of his own observations; and the third, which contained the lesser tables, was known by the title of *Al Shah*. Among other celebrated astronomers who flourished at this time, the names of Ahmed Ibn Kothair Al-Farghani, Abdallah Ibn Sahil, and Mohammed Ibn Musa Khawarismi, are particularly distinguished. The first wrote an introduction to astronomy, in which he clearly detailed the rules of Ptolemy, and the last is the author of the tables known by the name of *Sind-Hind*, which were used both before and after the Arab astronomers began to make observations.

At this time Al-Mamun invited a number of celebrated men to Baghdad for the purpose of making observations and of improving astronomical instruments then in use. Among these was Yahia Ibn Abil Mansur, a person of great repute, who was at that time living at Mekka. The astronomical observations made at this period were carried on at Shemasia, in the province of Baghdad, and at mount Kasion in the immediate neighbourhood of Damascus. The obliquity of the ecliptic was determined to be  $23^{\circ} 35'$ ; and, on the authority of Masudi, a degree on the earth's surface at the camp of Sinjar, between Rakka and Palmyra was found to be fifty six miles; which multiplied by  $360^{\circ}$ , again multiplied by 7 and divided by 22, according to the rule of Archimedes for finding the diameter of the circle, gave the diameter of the earth at six thousand four hundred and fourteen miles, being an error of one thousand five hundred miles less than its true diameter.

The Khalif Al Mamun was succeeded by the Khalifs Al-Mutasim, Al-Wathik, and Al-Mutawakkel, the last of whom was slain by his Tartar slaves, A. D. 861. During the reign of the former Al-Hasan Ibn Sahil Nubakhti flourished, and is the author of a book on the mansions of the moon. He appears to be the same person who is said to have stated the circumference of the earth at twenty-four thousand miles, an estimate not very far from the truth. About this time also Honain Ibn Ishak, and Sabit Ibn Korra, were held also in great estimation, and translated several medical, mathematical, and astronomical treatises from Greek and Syriac into Arabic. The former was a Christian of Hira, who translated Paulus Ægineta

\* See Tarikh Mukhtasar-al-Dawal, or Gregorii Abul-Pharajii Historia dynastiarum. Arabice, edita et Latine versa ab Edvardo Pocockio, page 161.

and the *Syntaxis Majisti* of Ptolemy; the other was, a Sabean,\* of Harran in Mesopotamia, who corrected the last work.

Ptolemy Claudius, the mathematician, is among the Arabs esteemed to be the first who made a globe and delineated the Astrolabe, and four of his works are known amongst them, viz. his *syntaxis* called *Al-Majisti*, his book of geography concerning the figure of the earth, his longitudes and latitudes of places, and his opinions on the influence of the stars. The first translation of the *Al-Majisti* appears to have been from Greek into Syriac by Honain-bin-Ishak;• it was subsequently translated into Arabic, in the middle of the tenth century; and into Persian in the middle of the thirteenth of our era. The translation from Syriac into Arabic is by Mohammed the son of Yahia, the son of Wafa Al-Buzjani of Nishapur; and that from Arabic into Persian was made by Nasir-ad-Din Tusi.

In the beginning of the tenth century, several astronomical observations were made in the town of Rakka of Mesopotamia. The philosopher and mathematician who made them, was Mohammed Ibn Jiaber, of the town of Batan, a dependency of Harran, who is usually called Al-Batani, and died A. D. 929. He is said to have been the most accurate of all the Mohammedan observers of the stars, and to have extended his investigation to ascertain the extent of their movements.

\* Note. The religion of the Sabeans appears to have been very similar to the followers of the Vedas among the Hindus, and the account of it given by Gregory Abul-Fatij is very curious. The things pertaining to this religion were written in Syriac, such as their laws, their precepts, and their rites, the manner of covering and burying the dead; concerning cleanness and uncleanness; what animals were suitable or not suitable for sacrifice; the times appointed for divine worship; and the appointed lessons at their prayers. That, however, says Gregory, which concerning the sect of the Sabeans is manifest to us, is, that their profession is entirely the same as that of the ancient Chaldeans; viz. that their Kibla is the north pole; that they diligently observe the four cardinal virtues; and that it is enjoined to them to pray three times; first, half an hour or less before the rising of the sun, so that the eight incurvations, each of which embraces three acts of adoration, may be finished during his rising; secondly, that their midday orisons, consisting of five genuflexions, each comprehending three acts of adoration, may be finished during the sun's declination; and that the third orisons, similar to the second, should terminate with his setting. The fasts fixed for them are one of thirty-days, of which the first is the eighth of the month Azar, one of nine days commencing on the ninth of Al Kanun the first, and one of seven days which begins on the eighth of Shebat. They teach the worship of the stars, to which they offer many sacrifices without eating any part, the whole of which is consumed by fire; they abstain from the use of beans and onions; some also do not eat pulse, cabbage, colewort, or lentils. Their discourses are similar to those of the philosophers, but their arguments to prove the unity of God, are much more convincing. They think that the souls of the wicked are punished for nine thousand years, and are then restored through the mercy of God.

Not long after, and during the reign of the Khalif Moti Lillah, the celebrated historian Abul Hassan Ali, commonly called Masudi, wrote his geographical and historical works, of which the last, *Muruj-az-Zuhab-wa-Muadin-al-Jawahir*, or *the meadows of gold and mines of jewels*, was begun in A. D. 943. In his cosmographical preface to this work, he states that he had travelled in Sind, Zanj, Sauf, Sin, and Ranij, (Burmah), and that at this time science had already perished, in as much as men laboured not to acquire it, and left its cultivation to ignorant pretenders who satisfied themselves with vain hypotheses. He was a native of Baghdad, who subsequently established himself in Egypt, where he died in Hej: 345, during the month of Jumadi-as-Sani, or September A. D. 956. Meshih says of him in his annals that he was well acquainted with history, and that in this matter he was very learned, possessing a multitude of curious facts, piquant anecdotes, and valuable outlines of knowledge. He composed a great number of works, of which several are mentioned in his preface to "The meadows of gold and mines of jewels."

In the time of Masudi, the Arabs carried on a great commerce with China, and are said to have traversed the country through its whole extent. Their vessels sailed from Basrah, Siraf, Oman, India, Ranij, and Sanf; and all strangers, who then frequented China, were allowed to visit the Court of the Emperor. Among others who made this voyage, Mohammed Abuyezid, an inhabitant of Siraf, is mentioned. He appears to have gone to China, A. D. 915, and is, some think, the same as Abuzaid, one of the two Mohammedan travellers mentioned by Renaudot, whose journey has been usually placed A. D. 877. Several centuries prior to this time Buddhist missionaries had come, from China into India, with a view of inquiring after the principles of their religion which had originated in the latter country. In A. D. 842, the Khalif Wathik, according to Al-Edrisi, had also sent a person from the city of Saumrah, on the Euphrates, to report on the rampart of Yajuj and Majuj, or that frigid region, beyond the confines of the country possessed by the Turks, which was subject to continual snow and rain. Salah the interpreter, who undertook this journey, travelled by Teflis, Al-Sarir, and Lan, on the western shore of the Caspian, to Bashgird on the Volga; hence through the country of the Votiaks, on the river Viatka, to the mountains between the sources of the Irtysh and the Jaxartes. After an absence of twenty-eight months he returned to Saumrah on the Euphrates; and travelling by Botan, and the lake of Taran, into which

the river Soghd emptied itself, he visited Samarkand and Khorasan, in which latter province Abdallah the third of the Tahir dynasty was then ruler.

Under the guidance of the house of Abbas the affairs of the Khalifat had been conducted with vigor for more than a century, when, at the death of Mutawakkil, its power began to languish; and Arabic literature, which owed to the princes of this house its origin, now began to decline. The Tartar slaves and mercenary chiefs had at their disposal the resources of the government, for nearly eighty years, embracing twelve successions. Literary institutions were less liberally endowed, and the crowd of learned men, who adorned and nobly supported the court of Baghdad, were now scattered to seek rewards and honors under the patronage of other sovereigns, who, at this time rose into power. Soon after the death of Mutawakkil, the first of the Sufauriah dynasty revolted and obtained possession of Sistan, Khorasan, the Kohistan, Kirman, and the whole of eastern Persia. This family was soon succeeded by that of Saman, and the race of Sabuktigin in Ghaznah; while the family of Buwaiha, taking possession of the provinces of Fars and Persian Irak, established their metropolis at Shiraz, and left nothing but the supreme ecclesiastical dignity, or Imamatus, to the Khalifat at Baghdad. Azad-ad-Daulah and Sharf-ad-Daulah, the second and third of this family, were liberal patrons of learned men; and the former had for his preceptor the astronomer Abd-ar-Rahman Al-Sufi.\* The latter patronized Mohammed Al Sagani Abu Hamid, who was distinguished for his knowledge of geometry and astronomy, and is said to have constructed, at Baghdad, instruments for observing the stars with the greatest accuracy. Sharf-ad-Daulah having an observatory in the citadel there, this astronomer was ordered to make observations on the seven planets, in which he was assisted by the astronomer and geometrician, Ibn Washan Abu Sahil; both of whom published a compendium of their observations. The latter made observations on the entrance of the sun into the signs of Cancer and Libra, during the year 1299 of Alexander's era, or A. D. 976; and about

\* Doctor Dorn in his description of an Arabic celestial globe, presented to the Royal Asiatic Society by Sir John Malcolm, says, Ibn Alnabdi, who was himself an extremely clever mechanic, mentions two globes which he had examined, and the excellent execution of which he had admired in the public library at Kahira in A. D. 1043. One of them he describes to have been made of brass by Ptolemy himself, which, of course, cannot be adduced as a proof of Mohammedan skill; but the second, made of silver, was constructed by Abul Hassan Alsufi, for the immediate use of the king Azad-ad-Daulah.



this period his patron founded, in the city of his nativity, the celebrated university of Isfahan, which flourished for many centuries, and enjoyed the reputation of being the best school for philosophy and medicine.

Arabic had been the language of the laws, the literature, and the science of Persia for nearly three centuries, when the Persian was restored to its ancient honor by the celebrity of Firdausi, and the patronage of Mahmud of Ghaznah. At this time several poets of celebrity were employed to turn into verse the Pehlvi legendary tales and chronicles of Persia; and the Ajamian (barbaric) tongue, which had lost its purity and harmony, by the admixture of a harsh foreign language, obtained consideration among the Mohammedan princes of the dismembered Khalifat, who gloried to number among their friends the celebrated poets and philosophers of their age. Arabic however still continued to be the language of business, and was used in important works that treated of liberal arts and sciences; and Persian, though employed by the poets, did not become the language of the astronomers and geographers until several centuries afterwards.

Under Sultan Masud, A. D. 1038, Abul Rihan Mohammed, the son of Ahmed Al-Biruni, a distinguished mathematician and author of many works, published the *Kanun-al-Masudi*, or *astronomical tables*, in imitation of those of Ptolemy. He is called by Ferishta Anwari Khan Khawarezmi; and is said by others to have been profoundly learned in the various schools of philosophy among the Greeks and Indians. According to Gregory Abul Farij, he went to India, where he acquired the learning of their school, and in return taught their learned men the manner of philosophizing among the Greeks. The books he composed were many, his opinions were altogether trustworthy and founded on fact, and in short, says Gregory, he had no rival either in that time or in this, who more clearly understood astronomical science, or who could more thoroughly search into small or great matters.

The most illustrious, however, of Arabian geographers, and the best known to Europeans, is the Sharif-al-Edrisi; who, in A. D. 1153, wrote his geographical work, the *Nuzhat-al-Mushtak*, or *recreation for those who wish it*, which was translated into Latin by two learned Maronites, and published at Paris under the title of the *Nubian Geography*. It was written, by order of Roger, king of Sicily and Antioch, in explanation of a silver globe, weighing four hundred

pounds, on which was described the figure of the earth, its countries, cities, and general features. The arrangement 'observed in the work is that usually followed by Mohammedan geographers; who, commencing at the equinoctial line, divide the world into seven climates, and extend northwards to where cold renders the earth uninhabitable. Our author belonged, as appears, to the illustrious family of Edrisi, who formerly ruled in part of Africa, and took his title of Sharif after the manner of those who claim affinity with the prophet Mohammed, and account themselves his descendants. The work, known by the name of the Nubean Geography, is a very imperfect translation of the original, and is disfigured by numerous errors in the names of places, which more extended oriental knowledge, and geographical research, have rendered familiar to us. A new translation, from the Arabic, by the Rev. G. C. Renouard, has been for some time promised to the learned, by the Oriental Translation Fund of Great Britain, and is a thing much wanted, as it promises to be useful to geography at large.

Six years prior to the time when Edrisi wrote, navigators from Lisbon performed that singular voyage, westward on the sea of darkness, *Bahar-al-Muzlim* (or *Atlantic*), which is mentioned by Ibn-al-Wardi and our author. Having equipped a vessel with provisions, necessary for a long voyage, they swore that they would not return till they had reached the end of that sea and land, which must be, they thought, to the west. After advancing for twelve days in the open sea, they were carried for twelve days more into a sea of unfathomable depth, where there were immense waves; and their course, being to the south, they made the island of Al Ghanam, or the island of sheep. Having taken in water they continued their voyage southward, for twelve more days, when they discovered an inhabited island, near which they saw some barks, where were red men of large stature, who conducted them to a house situated on the shore of the sea. In three days after, an Arab interpreter came to them, requesting to know the object of their voyage, and subsequently went to the king of the island to render him an account of it. The king told them that he also had sent persons to explore that vast ocean, who, after navigating it for a month towards the west, were arrested by a thick darkness and obliged to return. The Lisbon navigators, being informed that they were a month's sail from home, returned to Lisbon; where, in memory of this event, a quarter of the city received the name of Almagrurim, or the wanderers, by which

it was known in the time of Ibn-al-Wardi, who was coteremporary with Kaswini A. D. 1232.\* De Guignes, who has given a general view of Ibn-al-Wardi's work, thinks that the island could not have been one of the Canaries, since the Arabs were acquainted with the western coast of Africa and frequented these islands. Others with reason suppose, that the bearings indicate that the two islands visited, during this expedition, were Madeira and one of the Canaries.

At Tus, Ghaznah, and Isfahan, Persian literature had flourished with considerable success for nearly three centuries; when, in the beginning of the thirteenth, the irruption of the inhabitants of Northern Asia, threatened to be as destructive of literature, as had been the conquest of the Goths and Vandals. The Moghals and Tartars, who, under Jenjiz Khan, rose on the frontiers of China, carried their irresistible arms over Transoxiana, and Persia; and though the barbarians could neither read nor write, Jenjiz tolerated religion and affected to respect literary men. Halaku Khan grandson of the conqueror, assumed the sceptre of the Moghal empire, about A.D. 1257; when having made his entry into the metropolis of the Khalifat, he put the Khalif Mustassim to death. The devoted city of Baghdad was pillaged, and the feeble representative of the house of Abbas, with his kindred and officers, was sacrificed to the vengeance of the conqueror. During his auspicious reign, Persian literature flourished; and, while Sadi wrote poetry, Nasir-ad-din Tusi advanced the interests of science by his treatises on ethics and astronomy. The latter was chosen vizier by Halaku, and being a fine Greek scholar, made a translation of Euclid into Arabic, and is the author of the *Akhlak Nasari*, a translation of part of which has been published in the second volume of the Transactions of the Literary Society of Bombay. Nasir-ad-din Tusi is among the Persians a person of distinguished fame, and is author of the celebrated astronomical tables, commonly known by the name of Zij-Ilkhani; so denominated from the title of his master. According to the authority of a celebrated Persian history, the *Habib-us-Sair*, Mangû Khan, during his Chinese expeditions, acquired a taste for astronomical research, and had been long anxious to find a person who could aid him in the construction of an observatory. When circumstances soon after led him to the determination of subjecting the country west of the Oxus, instructions were given, to his brother Ha-

\* See Notices et extraits des Manuscrits de la Bibliothèque du roi. Tome Deuxieme, page 26.

laku that, after reducing the strong holds belonging to the disciples of Hassan Sabah, or Old man of the mountain, Nasir-ad-din Tusi, then celebrated for his skill in astronomy, should be sent to Court. This astronomer had been liberally patronized by the governor of Maimundezh, in the Kohistan,\* to whom, in A. D. 1225, he had dedicated the *Akhlak Nasiri*, a system of ethics translated from the Arabic; and, on the reduction of that fortress, he waited on the conqueror Halaku, who captivated by his talents and conversation, detained him about his own person, instead of sending him to Court according to the instructions from his brother. The conquest of Baghdad followed soon after; and Halaku, still eager in the pursuit of his favourite science, ordered the astronomer to construct an imperial observatory, on a lofty eminence near Maragah, a city of Azerbaijan in Persia. In this undertaking he was armed with power to command the resources of the imperial treasury, and was soon able to bring to completion the construction of the building. It was furnished, they say, with an apparatus representing the celestial sphere, the signs of the zodiac, the conjunctions, transits, and revolutions of the heavenly bodies. The rays of the sun, admitted through a perforation in the dome, fell on certain lines of the pavement, so as to indicate, in degrees and minutes, the altitude and declination of this luminary throughout the year, marking also the time and hour of the day. The observatory was also supplied with a map of the terrestrial globe, its climates, or zones, exhibiting the several habitable regions, an outline of the ocean, and the several islands scattered over its bosom. Several celebrated mathematicians were invited, by Nasir-ad-din Tusi, to assist in the celestial observations made at this observatory; and, by order of Halaku, Muaiyid-ad-Din Alfaradi, and Yahia Ibn Almaghrabi, were ordered to give him their aid in forming the astronomical tables already mentioned. At this time an error in the mode of formerly adjusting the commencement of the new year was detected, by observing the now extraordinary difference between the sun's altitude and declination, and former recorded periods. Nasir-ad-din Tusi died A. D. 1273.

Some time prior to the death of the above celebrated astronomer, Zakaria-bin Mohammed, commonly called Kazwini, a native of Kazwin in Persian Irak, composed his geographical work, called *Asar-al-Balad-wa-Akhbar-al-Ibad*, or *the traditions of regions and the history of men*. It is a geographical and historical work, divided

\* The mountainous range between Persian Irak and Khorasan.

into seven climates, and the names of cities arranged alphabetically. He also wrote a cosmographical work called *Ajaib-al-Makhlukat*, or *the wonders of created things*. In this, the author first treats of things which are above, and are the subjects of astronomical research. He speaks of the celestial spheres, and commences with the moon, of which he describes the phases and eclipses; to the influence of which he ascribes the phenomena of the tides. The milky way is also noticed, regarding the nature of which nothing is ascertained; and from this he passes to Mercury, Venus, and the Sun, the eclipses of which he accounts for. He then passes on to the notice of Mars, Jupiter, Saturn, and the fixed stars. Here he describes the southern and northern constellations, the signs of the Zodiac, and the twenty-eight mansions of the moon. He subsequently speaks of the sphere of spheres, or the empyrean, and the angels; and details the names of the Arabic, the Syro-Grecian, and Persian months and years. The work then treats of things that are below, such as the elements, the fire, the air, the water, and the terrestrial globe; next of compound things, such as minerals, plants, and animals; the extraction of mankind, with the arts of agriculture, of weaving, of building, of commerce, and a variety of other subjects. The death of Kazwini appears to have happened about the same time as that of Nasir-ad-din Tusi.

The next celebrated contributor to geography, was Abulfeda, the historian, and chief of Hamah in Syria. After the death of his brother, Almalik-al Nasir Ahmed, who reigned at Hamah, and died in Hej. 743, A.D. 1342, Sultan Abulfeda Ismael succeeded him, and is the author of the *Takwim-al-Baldan* \* or *latitudes and longitudes of places*. He was born Hej. 672, A. D. 1273; and died in Hej. 732. A. D. 1331; and is not less distinguished, among the Arabs, for the extent of his erudition than the nobility of his birth, which connects him with the distinguished family of Salah-ad-Din. His geographical tables are arranged after the order of the seven climates; the degrees of longitude and latitude of each place being given on the authority of authors whom he quotes; and among whom Ptolemy, Alfaras, Al-Biruni, and Ibn Said Almaghrabi, hold

\* *Takwim-al-Baldan* means a Calendar of the cities. Several manuscript books of this kind, and by different authors, are to be met with. Among those, composed in modern times, is the *Takwim-al-Baldan* of Sadik Isfahani a translation of which has been published by the Oriental Translation Fund of Great Britain. The author was a follower of Sultan Sujah, the elder brother of Aurangzeb, and wrote a general history called *Subah Sadik*.

a distinguished place. The tables were written, as would appear, in A. D. 1321, and have been in part translated and published at different times. That portion of them containing the description of Mawar-an-Nahar and Arabia, will be found published, by the learned Graves, among the lesser geographers.\* In his preface to the *Takwim al-Baldan*, Abulfeda says, that though China is a great country, the information which they had concerning it was little, and that too mixed with lies; while their knowledge of Bulgaria, Circassia, Russia, Serir, Walachia, and the countries of Europe from the straits of Constantinople, was perplexed and uncertain; as they knew neither the names of the cities nor the manners of the people. The kingdoms of Nigritia, which extended to the south, were many, and divided among various tribes; among which he enumerates the Ahnabash, Alzanj, Alnubah, Altakrur, Alzila, and others of which they had little account.

Among the geographical cotemporaries of Abulfeda, worthy of notice, the name of Hamdallah Mustafa, sometimes called Kazwini, deserves to be mentioned; and must not be confounded with the author of the *Ajaib-al-Mukhlukat*, whose title has been already made familiar to the reader. One of the geographical treatises written by the former is named *Ajaib-al-Baldan*, or *the wonders of towns*, which being confounded with the other cosmographical and geographical work, has led to the error of the too commonly received opinion, that both books were the work of one author.† Hamdallah Mustafa, was the son of Abi Baker, of Kazwin, who is the author of the celebrated Persian history, called the *Tarikh Guzidah*, or *select chronicle*; and his son, besides the *Ajaib-al-Baldan*, wrote an admirable geographical work, called *Nuzhat-al-Kulub*, or *recreation for hearts*, and which is frequently mentioned by Sir William Ousley.

The well known author of the physical geography, *Kharidat-al-Ajaib*, or *the pearl of marvels*, seems to have been the cotemporary of this last Kazwini, and not the former one; which confusion of names between the two authors, has led M. De Guignes, in his analysis of the work, to suppose that its author Ibn-al-Wardi was alive in A. D. 1232.‡ The Kazwini seen by Ibn-al-Wardi is therefore Hamdallah Mustafa, who lived in the 14th and not the 13th century.

\* *Geographiæ veteris scriptores Græci Minores*, Vol. iii.

† See *Chrestomathie Arabe*, ou extraits de divers écrivains Arabes, tant en prose qu'en vers. Par. A. I. Selvestre De Sacy. Tom. III. page 425.

‡ See *Notices des manuscrits du roi*. Tom. II. page 20.

Ibn-al-Wardi, whose name is Siraj-ad-Din, the son of Hafs Omar, wrote his work at Aleppo, and died about A. D. 1348 ; while others are of opinion that he flourished even later. The copy of his work which is in my possession, was obtained at Damascus, and contains two general maps of the world. One of them exhibits the *Bahar-al-Muḥīṭ*, or the great ocean which surrounds the earth, and beyond which flows the *Bahar-al-Muzlim*, or the sea of darkness, of which all the other seas are only gulfs. Of these he mentions the sea of Persia, which comes from the great sea on the east, and stretches from China to the sea of Kolzum, or the Red Sea. The sea of Rum, which is described to be on the west, after washing the shores of Spain and Syria is said to join the strait of Constantinople. The seas on the west or *Bahar-al-Maghrib*, the sea of Khozar, and the lake of Khawarizm, are then enumerated, along with the countries of Siklab or Slavonia, of Russia, of Bulgar, of Khozar, of Tibet, and Hajuḡ and Majuḡ on the north. His description of central Africa is curious and full of information, and he describes the great trade in salt which is carried on between the country of Maghara on the sea and the other territories of Saudan. The second map embraces the different countries surrounding, in a circle, the holy Kaaba which is placed in the centre of the world.

A considerable portion of the geographical knowledge possessed by the Arabs, is to be met with in dictionaries, or gazetteers, in which the names of the cities are alphabetically arranged, and the longitudes and latitudes sometimes given. M. De Guignes has translated a book of this kind, namely the *Kitab Talkhis-al-asar-wa-Ajaib-al-Malik-al-Kahar*, or an abridgement of history and the marvels of the all powerful king, ascribed to Abd-ar-Rashid, the son of Salah, the son of Nuri, surnamed Yḡkuti. This is a universal geography, in which there are various details of the productions of each country, the objects of its commerce, and its minerals. The longitude and latitude of different places are frequently given, and the former is reckoned from the first meridian of the Canary islands. Some doubt exists as to the name of the author, which is said to be Bakuwi, and not Yakuti ; and, if the former reading be the correct one, he could not have lived earlier than A. D. 1403 ; as the city of Baku, on the Caspian, from which he derives his surname, was not built at an earlier period. Yakuti too is mentioned by Abulfeda, and was an inhabitant of Hamah, in Syria, who lived much anterior to this period ; and the geographical dictionary *Maajam-al-Baldan*,

of which I possess a copy, is stated in the title page, to be the work of Yakuti Alhamawi; and is very different from the work translated by M. De Guignes. In the introduction it is named *Marasid-al-Ittilaa ala-isma-il-Imkanat-ia Albukaa*,\* or *explanatory observations on the names of places*, and cannot be the same dictionary as the *Talkhis* already mentioned.

The latest, and not the least distinguished,† of Mohammedan geographers, who, previous to the revival of learning in Europe, sustained the interests of astronomy and geography, was the grandson of Tamerlane, the celebrated Alagh Beg; who after the death of his father Shah Rukh established his Court at Samarkand. His eminent attainments in science, and more particularly in astronomy, must ever claim the attention of oriental readers; though he unhappily exhibited that superstition which was common to his countrymen, who were addicted to the absurd speculations of judicial astrology. He is the well known author of the tables of longitudes and latitudes, the *Zij-Alaghbegi*, which were published by Graves\* along with those of Nasir-ad-Din Tusi. In a manuscript copy of this work, now before me, Alagh Beg gives an account of the various cras, the mode of observing the sun and stars, and the methods of ascertaining the longitudes and latitudes, and of which no notice is taken in the tables edited by Graves.

The author as would appear, constructed at Samarkand, an observatory, where there was a quadrant of great size, of which the radius was equal to the height of the cupola of St. Sophia at Constantinople; and was assisted in his astronomical observations by Salah-ad-Din Musa, otherwise named Kazi Zadai-Rumi, who was, he tells us in the preface, his first astronomical master. This person, who soon after died, was, we conclude from his name, a Greek of Constantinople; where at this time, astronomy and geography were so little attended to, that not long before Chionides, anxious to acquire a knowledge of the celestial sphere, was obliged to travel into Persia for this purpose.† He was succeeded in his office of master to the prince by Ghaias-ad-Din Jamshid, who also died before the completion of the astronomical tables; which were finished, by the assistance of Ali-Kushaji, the son of Mahommed, of whom Alagh Beg thus speaks. "I strongly hope that this report of his skill will

\* In a catalogue of books, collected by the late Mr. Burekhardt, this work is said to be the production of Safi-ad-Din, the son of Abd-al-Hak. It is probable that this was his name and the other his title.

† See Transactions of the Royal Asiatic Society. Vol. II. page 372.



in a short time; extend over the world, as we have in this work detailed all that we have observed and examined, regarding luminous bodies, and have arranged the information in four chapters, trusting that the skilful, if they find mistakes will correct them, and conceal all that is not capable of emendation." The tables were completed sometime about the year 1437; from which period Arabic and Persian geography can be scarcely said to have an existence, as only a few minor works on this subject, compiled chiefly in India, are now to be met with. The *Haft Aklim* of Amin Ahmad Razi, written in 1570, is one of these works most generally known, but contains little geographical information, and is more a treatise on biography.

Though we cannot admit that the Arabs were very expert in the art of navigation, they nevertheless possessed a sufficient degree of enterprize, to occasionally forsake the beaten tract of the coasts, and seek their course through the wide ocean. Their commerce was extensive, without the assistance of the magnet; and simply by their knowledge of the stars, they ventured to make great voyages and attempted several discoveries. They ascertained the height of the sun by instruments, and calculated the latitude of their position; and though they have no claims as inventors, they certainly possess merit in having made their observations more skilfully, and with better instruments than the Greeks. \* From Ptolemy to Copernicus astronomy and the other sciences had made little progress; when about the end of the 15th century, the discovery of the mariners compass, the invention of printing, the voyage by the Portuguese round the Cape of Good Hope, and the flight of the remnant of the Greek sages at the capture of Constantinople, united to restore vigor to science, and to gradually diffuse that light which gave splendor to the seventeenth Century.

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VIII.—*A visit, in December 1832, to the Carnelian Mines, situated in the Rajpeepla Hills, to the eastward of Broach.*  
By Lieut. George Fulljames.

I left the large and once flourishing city of Broach on the morning of the 22d December 1832, and reached the village of Sookul-

\* M. De Guignes says, if in general we are curious to see how they speak of Europe which we know better than them, it will not be difficult for one to instruct himself from them on the subject of Asia, which they know better than us. *Notices des manuscrits du Roi* ii page 388.

teerut at 8 o'clock ; the distance from Broach seven kos. For the first four kos, the road passes through deep and dusty ravines, formed by the rush of water into the Nerbudda during the monsoon. The river evidently once flowed close to the high banks, through which the road winds. After passing the village, a highly cultivated plain opens to view, which is covered with grain of all sorts, but scarcely a tree is visible. This plain appears to me to have been at one time or other, the original bed of the river, for you have high *kunker* banks to the N. W. and cross the plain in an easterly direction ; and the soil appears to be formed of a rich alluvial sand. Sugarcane and other rich crops abound. At the village, however, large trees appear, and the river flows now nearly half a mile distant.

While we were breakfasting, our horses were ferried across the river in a flat-bottomed boat, one of the first I had seen in India. It resembles the common punt of the Severn, but has a sharp bow and stern, and does not appear to draw more than six or eight inches water. Some idea may be formed of the fertility of the soil at this village, when I mention, that the cultivators were paying twelve rupees per beegha. Sugarcane, dhol (cytisus cajan) bajra (holcus spicatus) are the objects of cultivation. From this village is seen the far famed Kubbeer Bur tree, growing on an island in the centre of the river. After breakfast we crossed the river, and, for three quarters of a mile, had to walk over its dry bed composed of fine loose sand, to the village of Minodrah, distant one and a half kos, in a direction nearly east. On approaching the village, the road is observed to be covered with pieces of agates of various colours. On inquiry we found that formerly most of the stones were worked here, but this has been discontinued, and the village in consequence is nearly deserted. I observed at a short distance from this village large lumps of scorice or slag, but the natives could not, or would not tell whether the slag was from copper or iron ore. I broke many pieces in hopes of discovering, but did not succeed. I think however it is from iron ore. The road passes through a very thick jungle composed of teak, &c. Between the last village and Ruttunpoor, we crossed a small river called Ruttunpoor kharee, the banks of which near that village are very steep, and covered to the edge with thick jungle. At this spot, as the strata were exposed, I could observe that the upper formation consisted of sand and *kunker* nodular limestone,) immediately below which occurs a compact sand

stone, in layers of from four to eight inches in depth. This latter would, I think, be found well adapted for grindstones. The sandstone is observed on both sides of the river, at about six different points above and below the village ; in the intervals, not occupied by the sandstone strata, occurs the kunker with occasionally a seam of yellow clay imbedding rounded pebbles, similar to the formation from which the carnelians are dug. The sandstone bears evident marks of having at some period been violently disturbed ; it exhibits an appearance similar to that caused by the breaking up of ice in a largeriver.

From Ruttunpoor we proceeded to the mines, distant one and a half kos, through a thick jungle. The whole road and all the nalas were strewed with agates; but these are not of a good description, and are therefore not used. To the left of the road is a high hill covered with jungle, and on the summit there is a peer's tomb. The only people residing there are a few sidees or negroes, who say that they were born and bred on the spot, whither their fathers came from Broach.

The mines that are now worked are situated on the sloping side of a small hill covered with jungle, and extend upwards of four miles. At the time there were upwards of one thousand men at work, chiefly coolies and mussulmans. Each man collects a maund and a half of good stones daily. The shafts of the mines are about four feet in diameter, so that the miners, in going up and down, do not require the assistance of ropes, &c. They cut niches in the sides of the shaft for their toes to rest upon, and by pressing their backs firmly against the sides, they in this manner ascend and descend without danger or difficulty. This I myself accomplished easily, after going down two or three mines.

The average depth of the shafts is thirty feet ; I descended into one which was thirty-eight feet. The galleries run off in every direction, or wherever the miner's fancy leads him to dig. Their height is five feet, and their width about four. The roof is arched, and the soil is a stiff clay, in which the stones are imbedded. The galleries seldom extend more than one hundred yards in length, but many of them join those of other mines. To each of the mines there are thirteen men attached, who work by turns; each man must send up so many baskets full of earth and stones, when he is relieved. All the other people are employed in sorting and trying the stones as they are brought up. They seat themselves around

the mouth of the shaft, and try each stone ; which is done by chipping off a piece with another stone. From the appearance of the fracture, they are able to judge whether the stone is good or not : the finer and more compact the stone, the better it will be when burned, and the blacker it appears at first, the redder it will become after undergoing the same operation, and when ready for being cut and polished.

The stones are brought up by means of a rude roller, or pulley, supported by four pieces of wood, let into the ground. This, with a small iron pick, not steeled, in order that the miner may not be injured by the sparks, a few bamboo baskets and one rope, compose all their implements. In one mine they had tapped a spring of fresh water at thirty feet, and had been obliged to abandon it until the hot season, when, they stated, they should be able to work it again.

The strata through which the shafts are sunk appear to be all nearly alike. The superficial bed consists of gravel, then red and yellow ochre; below which Fuller's earth and ochre again, then a thin seam of rock containing a large proportion of iron, below which lies the clay in which the carnelians are imbedded.

Each miner on his return to Ruttunpoor in the evening, carries a basket full of good stones, when they are spread out on the ground and exposed to the sun. They are thus collected for a whole year, and turned over every four or five days : the longer they are exposed to the sun, the deeper, or brighter, the colour becomes when the stone is polished.

In the month of May they undergo the process of burning, which is effected by placing the stones in black earthen chatties or pots. The pot is placed with the mouth downwards, and a hole is broken in the bottom; a piece of broken pot is then placed over this hole, and the whole is covered with sheep's dung, as no other material is said to answer for fuel in this operation. The pots are arranged in single rows, and the fires, which are always lighted at sunset, are allowed to burn till sunrise, when the pots are examined, and, should there appear any white spots on the surface of the chatty, it is considered that the stones are not sufficiently burned, and they are allowed to remain for a short time longer. After this process the stones are all re-examined; those that have flaws, &c. are thrown aside, and those that are not sufficiently burned are laid by for next year's burning; the remainder are sold for exportation.

The revenue derived from the mines is very insignificant at pres-

ent; but with proper management, I should say, it might amount to something considerable, if we may judge from the custom derived by the Nuwaub of Cambay, where almost all the stones are cut and polished, and pay a heavy duty both on importation and exportation; very few, if any, stones are now cut at Broach.

It may be proper perhaps to add here a description of the process of cutting, polishing, &c. the stones, as carried on at Cambay at the present day.

The most extensive consumption of agates is required for the manufacture of beads of every variety of size and colour, which are in demand for exportation to the African and Arabian coasts, as also to the island of Zanzibar and Mozambique, where they are bartered for ivory, gold dust, Rhinoceros horns, &c.

The stones are in the first instance broken into small pieces by means of hammers, and the beads are formed, in the rough, in the following manner: An iron pin is driven into the ground with the sharp point upwards. The person operating, places the part of the stone he wishes to break on this point, and with a small hammer he strikes the stone, and continues the process until it has become partially round. This operation is performed chiefly by women, boys, or young girls. The work is then carried to another person, who proceeds with the operation. He has a large slab of hard sandstone before him, placed in a sloping or inclined position, and with a clam made of two pieces of wood, with a joint at one end, and two nails in the centre, by which the stone is held, he works the stone over the surface of the slab, constantly changing its position, so that, in a very short time it becomes round. After this it goes to the polisher, and then to the driller. The hole is drilled by means of diamond dust and water. The drill is supported on a small frame, and worked by a long bow backwards and forwards. Seals, &c. are all cut in this way, except those that require flat surfaces. This is effected by a lap made of coarse lac and koorun (country emery,) and formed into a thin wheel, two feet in diameter, supported on two pivots, and worked by a strap of leather pulled backwards and forwards. Bloodstone, agate, &c. are formed into various articles by means of sheet-iron wheels of the various diameters, worked as the others, and supplied with diamond dust and water. The carnelian beads are finished, by putting a number into a bag, in which they are shaken together.

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*Proceedings. November 1st 1838.*

Captain D. Ross, F. R. S. President in the Chair.

I. M. Davis. Esq., W. Baxter, Esq., Lieutenant T. Postans, Lieutenant G. Jenkins, I. N. Lieutenant E. B. Eastwick, were elected members.

The following papers were presented, on the part of the Government of Bombay.

1st. Report on the weights, measures, and coins of Cabool and Bokhara. By Nowrojee Furdoonjee.

2nd. Vocabularies of the Barakee, Pashai Lagmani, Kashgari, Deer, Tir-hai and Aimak languages. By Major R. Leech.

3rd. A Memoir on the River Euphrates, during the late Expedition of the H. C. Steamer "Euphrates."\* By Assistant Surgeon I. W. Winchester.

The Secretary laid before the Meeting a "Report on the Geology of the Bombay Presidency, By Assistant Surgeon C. F. Collier."

Resolved, that the vocabularies, by Major Leech, of the languages spoken in the countries west of the Indus be printed in a separate form at the Society's expense, and that the offer made by Dr. Bird to superintend the printing and add explanatory notes to the paper, be thankfully accepted.

\* Printed in the present number.

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# PROCEEDINGS.

## OF THE

### BOMBAY GEOGRAPHICAL SOCIETY.

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FEBRUARY, 1839.

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PAPERS, ETC.

1. — *Report on the Sooloo Pirates.* By **Commander J. J. Blake, R. N.**

[TO THE SECRETARY TO THE GEOGRAPHICAL SOCIETY.]

Sir—I am desired by the Right Honorable the Governor General of India, to transmit for the Society's information, the accompanying copy of a Report from Commodore Blake, of Her Majesty's Ship *Larne*, regarding the Sooloo Pirates.

I have the honor to be, Sir, your most obedient humble servant,

(Signed.) H. TORRENS,

CAMP AT PUTTAWALLA, { *Officiating Secretary to the Government of India, &c.*  
6th December, 1838. }

### REPORT.

TO SIR FREDERICK L. MAITLAND, K. C. B.

Rear Admiral and Commander in Chief.

Sir—In compliance with your memorandum of this day's date, to "report to you any information I may have been able to obtain during my stay at Manilla, respecting the state of piracy in the Sooloo Sea;" I beg to inform you that on the arrival at Manilla, about two days before my departure, of some Singapore papers containing the particulars that transpired at the trial of the "Illano" pirates at Singapore, lately captured by Her Majesty's Sloop *Wolf*, and the H. C. Steamer *Diana*, off Tringany, I sought an interview with Don Jose Arcon, a Post Captain in the Spanish Royal Navy, and Don Villasicenzis his assistant, two officers who have been employed for some years, in watching and suppressing piracy amongst the southern group of the Philippine Islands and the Sooloo Sea; and I may observe, that the former officer while



I was at Manilla, received his promotion from Spain for his exertions on this service.

It appeared from their statements, that the Illanos are a distinct race of people, inhabiting the line of coast comprised within the bight of the bay of that name in the island of Mindanao, the shore of which is there one continued line of mangroves and swamp, and which communicates with an immensely extensive inland lake. This lake they consider as their strong hold and their home, and these people are termed by the Spaniards "Los Illanos de la Laguna." Here they build and repair their praos, which they convey to and from the sea by means of ways or platforms constructed of bamboo and rattan, placed on the unsolid surface of the mangrove roots and branches, over which their praos are hauled to and fro. On this lake too, they have their wives or females in the praos in which they live, and in short here they carry on all intercourse with each other. As an insulated and distinct community, born and bred in a life of piracy, they look on it merely as a means of living, and not as a criminal occupation; for this reason, nothing they meet with escapes their attack, in the shape of native vessels of those seas; but I was especially assured, and all accounts seem to confirm it, that they are quick and intelligent in the extreme in discriminating and instantly avoiding a canvas sail, or any vessel of European appearance; and so dexterous are they, that they in a moment lower mast and sail, and are hauled in among the mangrove shores, with which the innumerable islands thereabouts abound; and though the Manilla Government maintain a constant establishment at different points of Mindanao, especially at Sumboangan, it is but rarely that their Falras, (or gunboat launches,) succeed in capturing any of the "Illanos." Two of them however, were surprised, and secured in the early part of this year, and their crews, amounting together to about sixty, were in prison at Manilla. As they were not captured in any act of piracy, they are merely kept as prisoners, but what their ultimate destination may be, I know not.

The distance to which the "Illanos" extend their cruizes is shewn from the late capture off Tringany, but I was much surprised when pointing this out on the chart to the Spanish officers, above mentioned, at their assuring me, that they had no doubt made their round south of Borneo to the coast of Siam, that there is a pirate tribe on the north end of Borneo, daring and atrocious as themselves, between whom and the "Illanos" exists, and always has existed, a most deadly and unextinguishable enmity, and that the latter will never pass by the northern route. If these two tribes of depredators do meet, a most sanguinary conflict ensues, and I was assured that either of them will

even quit their plunder to attack the other, and thus prefer the gratification of feelings of hatred and hostility. The thing from which the "Illanos" derive their principal booty in their cruizes, is the captives they make, and sell on all parts of the eastern and southern coasts of Borneo, and the Macassar-straits. To this they principally direct their attention after they have supplied themselves with a sufficient number to pull at the oar, and do the other work of their praos.

They seldom cumber themselves with any thing from the cargo of a capture, save gold dust, or other valuable goods.

Though other descriptions of pirates infest those seas, the "Illanos" are always known from the peculiar construction and dexterous management of their praos; a drawing of one of them was shewn to me, which minutely corresponded with the description given of the one captured off Tringany.

It has been supposed that these "Illanos" are subject to, and act under, the directions, of the Rajah of Sooloo, but I was most positively assured by the Spanish officers mentioned above, as also by His Excellency Don Andies Garcia Camber, Governor of Manilla, that such is not the case. Captain Don Jose Arcon has had some communication with the Rajah of Sooloo, and is acquainted with his situation, his means, and his habits. He assured me, that the Rajah had neither means, power, nor influence over these "Illanos"—that they are a race purely piratical, of a distinct community, of wild, roving, predatory habits, dependent on no one, and acknowledging no external authority. It is true they frequent the island of Sooloo as they please quite unmolested, and without hindrance, as well as the other innumerable islands and mangrove banks, (called by us the Sooloo Islands,) supposed to be subject to the Rajah's sovereignty. One of these, called "Bang-een-Ghee," eastward of Sooloo, is their principal resort, as it affords convenience and facility for their piratical pursuits. It is composed principally of mangroves growing upon coral banks, and is well calculated for protection and secure concealment.

I was informed by Don Jose Arcon, that he had witnessed at one time nearly two hundred Illano praos, great and small, off this island, and on attempting to chase them with his "Falras," they outstripped all pursuit, and disappeared in the most extraordinary manner, dowsing masts and sails, and taking refuge among the mangroves. He compared these haunts to extensive nests, or banks of rats, where they can fly from one refuge to another, and which no means we, Europeans, here possess, could ever succeed in annihilating.

The island of Baseilan, I was also informed, is a common resort of the Illanos, and some of its inhabitants are pirates from their birth,

and it is not unusual for them to identify themselves with the Illanos; and though the whole Sooloo group is subject to visits from them from time to time, during their cruizes, they are in the habit of resorting to no other fixed points, except *Basçilan* and *Bang-een-Ghee*, the first of which is an island of very considerable size. They generally obtain their supplies of ammunition, &c. by trafficking with places which are in communication with the various small Dutch settlements, on the coast of Borneo and the islands.

The boldness and audacity of the "Illanos" cannot well be exaggerated. They have been known to enter the bay of Manilla, passing the signal station on the island of Corrigidor, where two gunboats are generally stationed, and capture boats or small vessels within the Bay. This, I believe, was proved on the late trial by two boys, who were captured by them in a boat off Cavite, about eight miles from the city of Manilla. From the laguna which they inhabit in Mindanao, they have been known not unfrequently to push a passage in their praos out to the northward by a small river which runs from the lake into the sea at Cagayan, where there is a Spanish settlement, a fort, and always a company of soldiers, whose random fire from musketry, after they have got clear, they have ridiculed by loud shouts and wild yells of defiance. If they have reason to suspect that a particular lookout is kept for them, when on their passage to seaward, by the Spanish *falras* stationed at Sumboangan and its neighbourhood, their quickness and penetration is incredible. They will move their praos with caution along the edge of the mangrove banks by night even for ever so short a distance, and haul them into an impenetrable concealment ere the dawn of day, and at last gain their object by persevering in their progress night after night, while lookouts are kept constantly on the edge of the mangrove banks unseen during the day.

The Spanish officers confessed to me, that their attempts to capture them have almost uniformly failed, by their quickness, cunning, and sagacity, and strange as it may seem, these extraordinary marauders, acknowledged foes to all they meet, through the advantage of locality, their own adroitness, the peculiar construction of their praos, and other natural circumstances so favorable to their lawless pursuits, maintain in spite of every thing, a constant intercourse with their home the *laguna*, almost without interruption.

It may not be irrelevant here to mention, that a treaty, (so called,) was concluded between the Rajah of Sooloo and the late acting Governor of Manilla, Don Salazar, about two or three years since. This treaty is however ridiculed at Manilla, as having been made with an

individual ignorant of the faith or meaning of a treaty, a mere cypher, nominally a Rajah, but possessing no control over his subjects, who regard not his authority and yield him no allegiance. This may tend to confirm the assurances made me, that the Rajah of Sooloo possesses not a shadow of power or influence over the community of the "Illano" pirates.

The foregoing details are recited from memory, but are the true substance of information I gathered, during a long verbal communication over charts, with the two very intelligent Spanish naval officers before-mentioned. And though they may not throw much additional light on the subject of piracy in the Sooloo sea, they certainly tend to confirm or explain some remarkable points of the evidence that transpired during the late trial of the "Illano" pirates at Singapore.

I have, &c.

(Signed.) J. J. BLAKE, Commander.

Her Majesty's Sloop Larne, Yoongkoo Bay, 13th August, 1838.

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II. — *An account of the route between Sonmeanee and Candahar, from the mouth of one of the horse dealers of Afghanistan.* Arranged by Captain W. C. Harris, of the Bombay Engineers.

[Communicated by Dr. James Burnes, K. H.]

Praise be to Allah; I have performed in safety no less than twenty-five journeys between the far famed city of Candahar and the sea. The village of Bela Kuruz, which is within sight of the Caubul gate of Candahar, is the place of my nativity, and I have been a traveller from my cradle. Herat and Bokharā excepted, there is no part of Afghanistan that I have not visited. I am equally well acquainted with Sindh and Hindostan; but where is the land that can match the paradise of my birth! In the days of my boyhood, I annually accompanied my much revered father to the town of Beilow in Lus, where we purchased the sheep and goats of Beloochistan in order to retail them in Candahar. Our caravan at its outset, could usually muster from three to four hundred souls; but as occasion offered during our progress, we dispersed over the country in small parties. In later years it has been my wont, to carry horses from the northern provinces to the market of Bombay. These I at first embarked at the seaport of Sonmeanee in Beloochistan; but Mandavie in Cutch, affording superior facilities for the embarkation of cattle, I have since

preferred that bunder on my way down ;—uniformly however, returning viâ Sonmeanee, in the boats of one Taroo, an opulent Hindoo merchant, shrivelled, and of remarkably diminutive stature, who has long resided in that town.

Except at Baran Lukh, between Beilow and Wudd, where there is a range of hills which shall hereafter be described, the country south of Candahar presents no sort of obstacle to the advance of the largest army. Water is every where to be obtained from rivers, canals, and wells. Supplies of every description are extremely abundant; and the soil, generally speaking, is so richly cultivated, that an agent of the commissariat, if sent three or four days in advance, might purchase grain in unlimited quantities. Between Wudd and Sonmeanee only, on the downward route, it is usual for horse merchants to carry with them a supply of kurbee and dried clover—forage in this district being obtained from the hills with some difficulty, and of inferior quality; but this formed no part of my reason for preferring the more circuitous and unsafe route by the Bolan or Gundava passes, and Mandavie.

The town of Sonmeanee belongs to the Jam of Beilow, a youth of fourteen or fifteen years of age. It contains upwards of one hundred houses, with a population of Hindoos and Mahomedans in about equal proportion; and is situated at the head of a bay which forms a favorable harbour. The port is much frequented by boats of large burthen, of which Taroo, the Hindoo, possesses as many as twelve or fifteen, capable of carrying twenty-five or thirty horses. The trade with Muscat is equal, if not superior, to that of Kurachec, and the principal exports are ghee, sheep and goats' wool, sharks' fins, and bark for tanning hides. I usually sojourned at Sonmeanee a week or ten days, and having collected a sufficient number of camels for the conveyance of my investment of cloths and merchandise, returned by easy marches to my native city, which by the blessing of God, I reached in about twenty days.

At the distance of thirty coss, or four days journey from Sonmeanee, is Beilow, the residence of the Jam aforesaid. This town contains at least two hundred and fifty houses of Belooches, and is defended by a small fort constructed upon a tumulus. The road is extremely good, and forage is the only deficient article of supply. Lyaree, a fine town on the Poorallee river, with numerous wells, is the first stage. Oothul and Wurreearee are the two next; they are both abundantly supplied with water, and contain from forty to fifty houses.

Five days supply of grain should be taken from Beilow, there being

no village on the line of road between that town and Wudd. On a branch of the Poorallee, some four coss beyond Beilow, is a magnificent water-mill, capable of grinding in a single night, corn sufficient for the consumption of a vast army. The Poorallee itself is crossed without difficulty, eight coss further on, the channel being shallow and the banks shelving. Immediately after leaving the river, the road enters a hilly tract through which it winds almost to Wudd; not however presenting any insurmountable obstacle to the passage of wheeled carriages. This range is infested by two clans of Belooches, (under Mehrab Khan of Kelat,) who levy an impost of sixteen rupees per camel between the Poorallee and Wudd. Wullee Mahommed Khan is chief of the Menghul tribe, and with his son Ruheem Khan, who conducts the magazine, resides at the latter place; whilst Fuqeer Mahommed Khan, son of Kehrah Khan, deceased, resides at Nal, near Khozdar, and is chief of the tribe of Bezinjow.

Ten coss from the Poorallee river, the traveller will arrive at a mosque and cemetery, called Kanojee, where there is abundance of clear water. Baran Luk, the next halting ground, is ten coss more, over the worst part of the hill road, there being a broken and considerable ascent of one and a half coss. Eight coss beyond is the Toorkabar river, which it is usual to cross to Ab-i-goom, a resting place one fursung in advance. Wudd is six coss from Ab-i-goom; it contains upwards of one hundred houses of Belooches, besides ten or twelve shops, and stands on the bank of a canal, brought through a richly cultivated plain from the neighbouring hills.

These heart alluring canals, which are so numerous in Afghanistan, and so conducive to the fertility of her provinces, are supplied by subterranean aqueducts, extending in many instances to a distance of several miles. The spot in which water will be found at a suitable depth from the surface, having first been divined by a skilful engineer, who applies his ear to the ground for that purpose, a shaft is sunk in the neighbourhood which it is proposed to irrigate, and a gallery is thence driven to the source. The corn mills which are constructed upon these canals, are turned by an extremely simple combination of horizontal wheels.

Seemam is a large rivulet about eight coss from Wudd. It is a fine stream of running water about three feet in depth; and the road, which is a capital one, skirts the bank upwards of three coss. There is one small hill to cross, but it is a trivial ascent, and offers no impediment. The large town of Khozdar is six coss further, over a capital road. Here are luxuriant and beautiful gardens, with no less than eight water mills, surrounded by many acres of lucerne cultivation. The bazaar

is extensive, and contains twenty-five houses of Hindoo merchants; the rest of the population being Belooche.

Baghwana, which is six coss beyond Khozdar, is a still larger town than it, with unlimited cultivation watered by ten or twelve beautiful streams. There are four water mills, and grain as well as every article of supply is extremely abundant. The next halting ground is at Larkhorean, eight coss, where there are upwards of two hundred artificial tanks for the purpose of irrigation, but no village very near to them. Jurroo Karcz (or the canal of Jurroo Beebee), six coss further, being also without a village, it is prudent to bring from Baghwana a sufficient supply of grain to last to this stage, which may easily be done, since the whole road is excellent.

Six coss further is Sohrab—a cluster of populous towns containing two hundred Bannians' houses, and from two to three thousand houses of Belooches, surrounded by numerous rivulets of chrystal water, with five mills, and abundant cultivation. Supplies should be taken hence to Sirmasing, ten coss, where there is no village, but a nullah and seven or eight wells. Rodinjooe, four coss further, contains upwards of one hundred Belooche houses, a fine canal affording a plentiful supply of water for irrigation; and six coss beyond stands the city of Kelat, the metropolis of the province of that name, and the residence of Mehrab Khan, a tributary of Koondul Khan, the chief of Candahar. Kelat contains about four thousand houses, and has been too often visited by Europeans to demand further notice in this place.

Thus the total distance between Sonmeanee and Kelat is one hundred and thirty-seven coss, or two hundred and seventy-four miles—the coss, being equal to about two English miles. As compared with the route by the pass of Bolan, there is little danger to be apprehended from Bandits; but it is usual and prudent for the traveller to engage a small escort from Bailow to Wudd; where it should be relieved by one from Wullee Mahommed Khan, chief of the Menghul tribe of Belooches.

Leaving Kelat, the first stage towards Candahar is Gurrug, five coss, where there is a cluster of wands intersected by five canals with two water mills. At Mungochur, six coss beyond, there are ten or twelve encampments of nomadic Belooches, residing in moveable huts or palls; and water is to be obtained from no less than ten canals. Chah-i-gooroo is a caravanserai, consisting of a small walled enclosure two coss further on the road, with a well and canal, but no inhabitants. Eight coss beyond this is Mustung, a large and populous town, with a fort and noble bazaar, thirteen aqueducts, three

water mills, numerous fruit gardens, and abundance of lucerne. This is the residence of Jubbar Khan Dooranee, a vassal of Mehrab Khan of Kelat.

Teerco is one and a half coss from Mustang. Here is a large bazaar containing from thirty to forty shops—a fort, opposite to the gate of which is a caravanserai, and endless gardens intersected by aqueducts, on which are constructed four corn mills. Two coss in advance is Kulmuk, which consists of seventeen Belooche hamlets surrounded by green lucerne gardens, and beautiful orchards, with a fine fort belonging to Assud Khan, chief of eighteen villages. Kulmuk is the boundary of the Belooche population in the direction of Candahar. All villages beyond it on the road are inhabited by the Kakur tribe of Patans, of which I am myself a member.

From Kulmuk there are two roads to Candahar; but the western route which I shall now detail, is greatly to be preferred to that by Ispunglee and Koitah to the eastward. Indeed this latter is rarely travelled.

Karungow is six coss, a large brackish river upon which stand five Kakur villages yclept G'burg, with nine aqueducts of fine water, and abundant cultivation. Three coss beyond, there is a small range of hills termed Ghuznurai, which may be traversed without difficulty. At their foot is a well of superb water, upon the junction of the road from the Bolan pass with that I am describing. On the northern side of the range also, is another well and a canal; and proceeding two coss we arrive at Denar Karez, a magnificent canal threading a perfectly level plain, where it is usual to halt. There are no permanent dwellings here, but the tents of pastoral families are generally to be found in considerable numbers.

Peshinka Lorah is a fresh water river, two and a half coss from Denar Karez. This stream is liable during the cold season, to sudden and violent inundations, which continue for a day or two; but at all other times it is quite practicable for artillery. In the language of Candahar, "Lorah" signifies "a river" generally; Peshin being the Pushtoo term applied to the very level and open tract of country which is traversed by this stream. It is intersected throughout by numerous artificial canals, and contains upwards of one hundred and fifty villages, inhabited chiefly by camel breeders and other wandering classes.

Four coss further on the route, is the village and canal of Goolistan Karez, with a small fortification and a water mill. From this point there are three passes leading over the Rooghance mountains to Candahar. The most direct is the centre road by Rooghance, but it is little



better than a foot path. Guns can only cross by Wuzzee, which is the left or westerly road; and it is usually preferred also for camels, although there is nothing to prevent their crossing by Kozuk to the eastward.

Chah-i-Nadir is a well eight coss from Goolistan Karez—about half that distance being hilly, and the rest level. At Koochee, five coss beyond, there is a reservoir of excellent water, but no village; neither are there any permanent dwellings at the ford of Jujah, a large river six coss further on, which is crossed without any difficulty.

Advancing from Jujah, the road skirts a considerable range of hills, (which stretch away to the eastward), and passes under the mausoleum of Peer Boluk Dewana, where it is always customary for the wayfarer to make an offering in money. The extraordinary ascetic, whose holy relics are here interred, passed a life of exemplary piety in the wilderness, without either raiment or habitation, subsisting entirely upon grass and the green herbs of the field. Had Shah Shooja ool Moolk when he last invaded Afghanistan, (on which occasion I accompanied the army), instead of proceeding by Ahmed Khan's hawuz, three coss to the eastward, visited the shrine of Boluk Dewana, and made the usual propitiatory offering to the saint, there can be no doubt that by the blessing of Heaven, he would have regained the throne of his ancestors.

Four coss beyond the mausoleum, is Mel, a broad canal flowing through a remarkably level plain. From this point is to be seen an extremely lofty and precipitous mountain, from the cloud capped peak of which, Leila and Mujnoon are said to have precipitated themselves, with the design of essaying their fate. It proving propitious the legend informs us, that the lovers alighted on their feet in the plain below without receiving the smallest injury.

Tukht-i-pool is another beautiful canal, flowing in rainbow brightness through an enchanting country, so remarkable for its level character, as to have given the name to a bridge which existed in the days of Nadir Shah, but which is now in ruins. It is four coss from Mel; and Leila Mujnoon is four coss more—a spot marked only by an humble tomb constructed over the grave of the lovers, who, tradition informs us, were here engulfed by an earthquake.

At Hajee Karez, five coss further, there is a considerable village on a canal, with two water mills, and a small fort, which has lately been rebuilt. The aspect of the country here is still singularly level. Two coss from hence is the Arghesan river, which although large, offers no obstruction. Dahree is one coss more—a village with an aqueduct and mill, and a small fort under the command of Islam Khan Barukzye, a relative of Kooudul Khan's.

The village of Khoosh-ab is six coss from this, and has a canal besides two wells. One coss further is Abdullah Karez, a village and small fort under Suddozye, who is related to Shah Shooja ool Moolk. The road then crosses a small ghat at the foot of which is a rivulet called Turnuk, and a mill situated about a coss from Abdullah Karez. Zakur, two coss beyond, is a very extensive village with from sixty to an hundred orchards containing every variety of fruit. Karuz, two coss more, is equally large, and even more famous for its gardens and vineyards. Proceeding two coss beyond it, the traveller reaches Timoor Shah's Killaa—a once famous, but now ruined city, surrounded by numerous hamlets and villages watered by the Rorah bāt or Nosh-i-jan river.

The Shikarpoor gate of Ahmed Shah's Kilaa, commonly called Candahar, is two coss from hence; making in all ninety seven coss from Kelat, or four hundred and sixty miles from Sonmeanee on the sea.

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*Route from Sonmeanee in Beloochistan, viâ Kelat, to the city of Candahar, as described by one of the Horse merchants of Affghanistan, to Captain W. C. Harris, Field Engineer, Scinde Reserve Force. Karachi, in Scinde, 5th April, 1839.*

Names of places.	Coss.	Remarks.
Sonmeanee.		A fine Beloochee town on the Poorallee river; numerous shops; supplies abundant, with exception of forage.
Lyaree . . . . .	7	From 40 to 50 houses; water and supplies abundant, forage excepted.
Oothul . . . . .	7	Ditto Ditto Ditto.
Wurrearee . . . . .	7	
Beilow . . . . .	9	A fine town and small fort, the residence of the Jam. 250 houses, shops, supplies and water, abundant.
A water mill . . . . .	4	No village. Mill a very large one on a branch of the Poorallee river.
Cross Poorallee river . . . . .	8	Practicable for guns; a shallow channel with shelving banks.
Enter a hilly tract		
Kanojee . . . . .	10	A mosque and cemetery. No village, water abundant.
Baran Lukh . . . . .	10	No village, water abundant. Between this stage and Kanojee is a rather difficult ascent of $1\frac{1}{2}$ coss; the rest of the road good but hilly.
Cross Toorkabar river . . . . .	8	Fordable and usually almost dry.
Ab-i-goom . . . . .	1	A resting place; no village: water abundant.
Wudd . . . . .	6	Upwards of 100 Houses of Beloochees; 10 or 12 shops; canal. There being no village on the line of road between this town and Beilow, 5 days' supplies should be brought

Names of places.	Coss.	Remarks.
		on from the latter place. Wudd is the residence of Wullee Mahomed Khan, chief of the Menghul tribe of Beloochees.
Seemani nullah . . . . .	8	No village; water abundant; road good, and skirting the bank about 3 coss.
Khodzdar . . . . .	6	Large Beloochee town; 25 shops; 8 corn mills; supplies very abundant.
Baghwanna . . . . .	6	Large Beloochee town; 4 mills; 10 or 12 running streams, and abundant supplies.
Larkhoreau . . . . .	8	No village very near; 200 artificial tanks, extensive cultivation.
Jurroo Karez . . . . .	6	A fine canal, but no village; supplies should therefore be brought on from Bhagwana to last 2 days.
Sohrab . . . . .	6	A cluster of populous towns containing about 3000 Beloochee houses, and 200 Bannians' shops; numerous rivulets; five mills, and extensive cultivation.
Sirmasing . . . . .	10	No village; a nullah with seven or eight wells; supplies should be brought from Sohrab.
Rodinjoee . . . . .	4	100 Beloochee houses; shops and a fine canal.
Kelat . . . . .	6	A city containing about 4000 Beloochee houses, the residence of Mehrab Khan, and the capital of Kelat.
Gurrug . . . . .	5	A cluster of wands, intersected by five canals with two water mills; supplies abundant.
Mungochui . . . . .	6	Water abundant from 10 canals, and supplies usually so. No permanent village, but 10 or 12 encampments of nomadic Beloochees.
Chah-i-Gooroo . . . . .	2	A small caravanserai, but no village, a well and canal.
Mustung . . . . .	8	A populous town with a fort and five Buzar; 13 aqueducts and 3 mills. Here resides Jubbar Khan Doorance, a vassal of Mehrab Khan's.
Teeree . . . . .	1½	Large town, 30 or 40 shops. A Fort and caravanserai, numerous aqueducts, and four corn mills.
Kuhnuk . . . . .	2	Seventeen Beloochee hamlets with a fort, the residence of Assud Khan, a profusion of orchards and cultivation; every article of supply most abundant. With these villages terminates the Beloochee population.
Cross Karungow river to G'burg . . . . .	6	Water brackish; fordable; a cluster of 5 Kakur villages, with 9 aqueducts; supplies plenty.
Cross small range of hills called Ghuznarai . . . . .	3	Road here as elsewhere good, and practicable for wheeled carriages; a well on the south side, where the road from the Bolan Pass joins it; a well and canal on the north side.
Denar Kar . . . . .	2	Many tents of pastoral tribes, but no permanent village; a magnificent canal; supplies obtainable

Names of places.	Coss.	Remarks.
Cross the Peshin ka Lorah . . . . .	2½	A fine river usually fordable, but liable to sudden freshes in the cold season, which seldom last more than two or three days.
Goolistan Karez . . . . .	4	A village and fine canal, with one well; supplies abundant.
Cross the Roghancee mountains by Wuzzee . . . . .		There are three passes over the Roghancee mountains, but the Wuzzee Pass alone is practicable for guns.
To Chah-i-Nadir . . . . .	8	Half this distance is hilly; no village or supplies here.
Koochee . . . . .	5	A tank of good water; no village.
Cross Jujjah river . . . . .	6	Fordable; no village very near, but supplies obtainable in the neighbourhood.
Mel . . . . .	4	The road from Jujjah skirts a range of hills (which run eastward), and passes under Boluk Dewana's mausoleum.
Tukht-i-pool . . . . .	4	A magnificent canal, but no permanent habitations.
Lerla Mujnoon . . . . .	4	A small tomb; abundance of water, but no dwellings.
Hajee Karez . . . . .	5	A large village on a canal with two corn mills, and a small fort; supplies abundant.
Cross the Arghesan river . . . . .	2	Fordable.
Dahree . . . . .	1	Small fort and village belonging to Islam Khan Barukzye; an aqueduct and mill.
Koosh-ab . . . . .	6	Supplies very plentiful; moderately large village; canal and two wells.
Abdullah Karez . . . . .	1	A village and small fort under Suddozye, beautiful canal.
Cross small Ghat and Turnuk nullah, to a corn mill on the latter . . . . .	1	Passable for wheeled carriages.
Zakur . . . . .	2	Four running streams, but no village.
Karuz . . . . .	2	Very large village; numerous orchards, and supplies of every description most abundant.
Timoor Shah's Kilaa . . . . .	2	Ditto Ditto Ditto.
Shikarpoor Gate of Ahmed Shah's Kilaa, or Candahar . . . . .	2	Now in ruins. It is situated on the Roh-bar or Nosh-i-jan river.
		The Capital of Koondul Khan
Total Coss 234		= 468 miles English

### III. — *Visit to the Hot Spring near Kurachee.* By Lieut. T. G. Carless, I. N.

[Presented by Government.]

The only part of the country in the neighbourhood of Kurachee worth visiting, is the valley of Peer Mungah situated amongst the hills about eight miles from the town, where there are several hot springs. My curiosity being excited by the inhabitants concerning a temple that stood there, which was said to be very ancient, I determined to

examine it, and on expressing a wish to that effect to the governor, one of the chiefs was ordered to accompany me to the spot.

After we had got clear of the grove and gardens outside the town and crossed the dry bed of the Lyaree, our road led to the northward, towards a range of low broken hills about five miles distant. Beyond the head of the Lyaree, the country is a level plain, completely over-run with large pricklypear bushes and mimosa trees, which, as you advance, rises slightly towards the foot of the hills, where the soil is composed of a light, loose clay, with here and there a mixture of fine sand.

An hour's ride brought us to the foot of the hills, which are about 800 feet high, and composed of coarse sandstone. We crossed them by an irregular rocky ravine which had every appearance of being the bed of a large torrent during the rains, and then pursued our way along several small valleys bounded by long narrow ridges, or detached hills. At the gorge of the pass by which we entered, a mound built of fragments of rock was pointed out to me, which is said to contain the treasures of an ancient monarch of the country, and to be the abode of a host of demons who prevent any one from attempting to open it. About an hour after we had left this spot, we gained the entrance of the plain or valley in which the springs are situated.

The valley of Peer Mungah is surrounded by hills 7 or 800 feet high, between which glimpses are occasionally obtained of the level plains beyond. An extensive grove of date and other trees occupies the centre of the plain, and, on the western side, there is another, above which is seen the cupola of a small white mosque, erected on a rocky eminence. Passing through several patches of cultivation, irrigated by the waters of the different springs, we dismounted in the largest grove where we found carpets spread under the shade of the trees and a repast prepared. Whilst we were partaking of it, a man was despatched to the spring to send away several women, who when we arrived, were enjoying the luxury of a hot bath, and as soon as they had vanished we proceeded to view it.

The spring gushes out in a small stream from amongst the roots of a picturesque clump of date trees, covering the extremity of a rocky knoll of limestone, about thirty feet high, and falls into a small natural basin, whence it escapes in numerous rills to the adjacent gardens. The name of this spring is Kishtee, but it was formerly called Kheer koonth, or the milk tank, from the water being milk white, which was no doubt owing to its flowing at that time over a bed of chalk. It is now colourless and perfectly pure, having no perceptible taste,

but from the stones in some of the rivulets being incrustcd with a soft substance of a dark, reddish brown color, it probably contains a small portion of iron. The water is so warm that at first you can scarcely bear your hand in it. I unfortunately forgot to take a thermometer with me to ascertain its exact temperature, but this was done by some of the officers who visited it afterwards, when it was found to be 133°. The natives say it cures every disease, and they not only bathe in it whenever they have an opportunity, but drink it in large quantities. They believe that all the springs in the valley owe their existence to Lal Shah Baz the celebrated saint of Sewm, who, in order to make the spot holy, commanded them to burst forth from the rocks.

In the centre of a small piece of grass land near the spring I observed what at first I took for a shapeless mass of mud, but on walking towards it, was warned by the Belooche not to go near it, as it was an alligator. In the utmost astonishment I asked them how it got there, when they told me it was sent by the Saint; and that at the temple I should see hundreds of them. The monster, which was about 12 feet long, was lying asleep on the grass, and, when one of the Belooche soldiers roused him by heaving a piece of rock at his head, sprung up in a rage, opened wide his huge jaws, and then sunk down again to sleep. I could not but be surprized at seeing the women and children passing and repassing within a few yards of this disgusting looking brute, and that too without appearing to think they had the slightest danger to apprehend.

The grove in which we had taken up our temporary quarters, is nearly a mile long, and composed chiefly of date trees, which yield fruit to the value of about 1000 Rupees yearly. There are also tamarind, mangoe, and nebeck trees in abundance, and altogether it is rather a pretty spot. From a small hill near it, my companions pointed out a high long mountain about 20 miles to the north-westward called Jibai Pubh, which is celebrated all over the country on account of the many wonderful stories related respecting it.

After every thing worthy of notice about the Kishtee spring had been examined, we mounted our horses and proceeded to the temple on the western side of the valley. It is surrounded by a thick grove, and on emerging from the narrow path that leads through it, we came suddenly upon one of the most singular scenes I ever witnessed. The accounts of my companions had prepared me for something extraordinary, but the reality far surpassed their description. Before us lay a small swamp, enclosed by a belt of lofty trees, which had evidently been formed by the superfluous waters of the spring

lose by, flowing into a low hollow in the ground. It was not a single sheet of water, but in consequence of the numerous small islets it contained, it appeared as if an immense number of narrow channels had been cut so as to intersect each other. These channels were literally swarming with large alligators, and the islets and banks were thickly covered with them also. The swamp is not more than 150 yards long by about 80 broad, and in this confined space I counted above 200 large ones from 8 to 15 feet long, whilst those of a smaller size were innumerable. Our horses were standing within four or five yards of several reclining on the banks, but they took no notice of them, and would not move until roused with a stick. In a small pool apart from the swamp, there was a very large one, which the people designated the chief, because he lived by himself, and will not allow any of the common herd to intrude upon his favorite haunt. It is worthy of remark that there were several buffaloes standing in the water in the centre of the swamp, and that although the large alligators frequently came in contact with them in swimming past, they never offered them the least molestation. The natives say, they never touch a buffalo, but will instantly attack any other animal however large. The appearance of the place altogether, with its green, slimy, stagnant waters, and so many of these huge uncouth monsters moving sluggishly about, is disgusting in the extreme: and, it will long be remembered by me, as the most loathsome spot I have ever beheld.

After gazing upon the scene some time, we proceeded round the swamp to the temple, where the priests had spread carpets for the party under the shade of some trees. They told me it was a curious sight to see the alligators fed, and that people of rank always gave them a goat for that purpose. Taking the hint, I immediately ordered one to be killed for their entertainment. The animal was slaughtered on the edge of the swamp, and the instant the blood began to flow, the water became perfectly alive with the brutes, all hastening from different parts towards the spot. In the course of a few minutes, and long before the goat was cut up, upwards of 150 had collected in a mass on the dry bank, waiting with distended jaws until their anticipated feast was ready. We stood within three yards of them, and if one more daring than the rest showed any desire to approach nearer, he was beat back by the children with sticks. Indeed they were so sluggish, and if I may use the expression, tame, that I laid hold of one about 12 feet long, by his tail, which, I took care however, protruded to a safe distance beyond the mass. When the meat was thrown amongst them it proved the signal for a general battle. Several seized hold of a piece at the same time, and bit, and

struggled, and rolled over each other, until almost exhausted with the desperate efforts they made to carry it off. At last all was devoured; and they retired slowly to the water. It was curious to stand by and see such a mass of these unwieldy monsters almost at your feet, fighting and tearing each other for their food, and there are few things I shall remember so long as this alligators' feast. They are held sacred by the natives, who number them at 1000, and, when the young ones are taken into account, this is by no means exaggerated: for every rivulet a foot wide and a few inches deep, teems with them.

The mosque is a neat white building of a square form, surrounded by a broad terrace, with a cupola and slender minarets at the corners erected on the summit of a rocky crag of limestone, and is said to be 2000 years old! It is dedicated to Peer Hadjee Mungah, who is esteemed a saint by both Hindus and Mahomedans, and is held in such high veneration throughout Sindh, that numbers of bodies are yearly brought from a great distance to be interred near this shrine. The valley in consequence is covered with burying grounds which are full of tombs elaborately carved and ornamented. All my attendants took off their shoes at the bottom of the flight of steps leading up to the terrace, but as I declined to do this, the priests did not insist on my following their example. The interior of the mosque contains a tomb surmounted by a canopy of carved wood-work, supported on slender pillars, the whole being very neatly ornamented, and kept in excellent order, as are the building and terrace, which are built of stone. On the side of the rock looking towards the alligators' pool, the perpendicular face of the cliff is covered with a coating of smooth chunam, and from the lower part the principal spring gushes forth through a small fissure. The water is received into two stone reservoirs, and then escapes through several outlets to the swamp below. In one of them was a large alligator with about a dozen young ones which the inhabitants have named the peacock, and consider it the progenitor of the whole race. The water of this spring is perfectly fresh and slightly warm, but at another, a few yards from it, it is quite cold.

On leaving the temple we crossed the valley towards the salt spring, which is situated on the eastern side at the base of a narrow ridge of sandstone, about 600 feet high. The water is extremely salt, and after forming two or three small pools escapes in several streams, swarming with small alligators, through an opening in the ridge, and is absorbed in the sandy plain on the other side. The natives say the water in the pools sometimes rises and falls, and attribute this to the influence of the ocean tides upon it; but this cannot be the



true cause, for the rise only takes place at long intervals, and the plains besides ascend gradually from the sea up to the spot, which I estimated to be about 150 feet above its level. That there is a considerable rise in the water at times is evident from the extent of ground about the spring that has been overflowed, which is covered with a saline incrustation to the depth of two or three inches, and it is probably produced merely by a sudden increase in the body of water issuing from it, caused by a heavy fall of rain amongst the mountains in the vicinity.

1st February, 1838.

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IV. — *Narrative of a Journey across the Syrian Desert.*  
By Lieut. H. A. Ormsby, I. N.

Across the great desert from Baghdad to Damascus the route is always considered one of great peril and privation for small parties, and seldom undertaken, except under the protection of a large caravan, of which there was now no chance, although there were many persons, who, like myself, wished to quit the infected city. The plague had already reached the Arab camps in the district, which rendered it a matter of the greatest difficulty and expense to procure cattle. The road by Merdin and Orfa, on the northern confine of the desert, and by the Oasis of Palmyra to Aleppo, were now impassable from the dire ravages of war and pestilence. Mr. Elliot associated himself with me in this journey, an addition the more desirable from his attainments as a draughtsman and linguist. After some difficulty we procured camels, and settled with a respectable shaikh of the Agail Arabs to conduct us across the desert.

After quitting the British residency, we lodged with the person with whom we had settled to conduct us to Damascus. On the 2nd of April 1831, our camels were brought in from pasturage, which gave us hopes of being able to start. It however set in a rainy day, attended by a great increase of plague cases. Abdulla pleaded the wet weather as an excuse for not starting; but the next day disclosed to us, that the death of our camel drivers was the true cause. On the third we put our things in order for leaving, but were again detained all the morning for a camel driver. The one that had been hired yesterday, was lying in the yard writhing under the severest stage of the plague. At noon we quitted the shaikh's. We were now detained in the street, as the parting scene between Abdulla and his young wife was like that of a Conrad and Medora. She wished to

accompany him, but a few of the tribe carried her into the house. Abdulla pretended to be proof against the effeminate fears of his beloved, but I saw his manly cheek pearly by a few fast dropping tears, perhaps the first that had ever run that course since his manhood. A crowd of Abdulla's friends assisted us to load our camels, so we were soon moving to the western gate of the city. Victims of the plague were carried past us at every step. Most of them on donkies, a violation of Moslem respect to the dead, as every Moslem is obliged to lend his shoulder, to bear the passing corpse to its last bourne. We were soon clear of all contagion. From a state of anxiety, our spirits rose to calmness, and although we had a long and cheerless journey before us, still the bright prospect that ever cheers the traveller, a speedy change of scene, soon worked a wonder on our lagging spirits. We had quitted a place, where the misery of the dying was only equalled by the horrid certainty the living had, of so soon following them.

When clear of the city of Baghdad, the traveller at once finds himself on the desert, with little to relieve the eye but the emblems of mortality that occupy the skirts of all eastern towns. The little mosque-tomb of the fair and accomplished Zobeida, stood on our left in the midst of a thousand other tombs, where perhaps repose the remains of the murdered vizeer Jaffeer and some hundred others of the literati, who illumined the Augustan age of the Arabs, and rendered Baghdad's renown more lasting than any other of her monuments. Our course lay along the Kasmeen road\* which was extremely bad, broken by frequent exavations having been made to procure bricks for the purpose of building and repairing houses in the town. Most excellent bricks are found here in large quantities. At a bend of the river near the village of Kasmeen we filled our water skins, which held twenty gallons, and otherwise prepared ourselves for a long traject across the desert.

Abdulla prayed for the success of our journey, and I sat on the grassy slope of the river bank, and penned these few memoranda.

The river here is about four hundred feet wide,† which is considerably less than it is at Baghdad. There is at this time a large body of water in the river, and the velocity of the current ‡ five miles an

\* Kasmeen from Baghdad three and a half miles.

† It is between six and seven hundred in Baghdad Reach.

‡ During the freshes it runs nearly seven miles an hour. When the river is at its usual winter height it runs from four to five. I measured the rate of the stream, by observing the time some floating particle of wood took, to pass a measured distance.

hour. But the Tigris glides smoothly and silently on its dull course towards the sea; not as formerly floating the riches of the two worlds in exchange, and bathing the foundations of many mighty cities. It now, too, idly floods its banks; no Fellah here meets nature in her desire to improve. The present inhabitants of this once glorious land, are sunk in the slough of barbaric ignorance. This was the richest province of Cyrus's empire\*—where the learned Xenophon fought and wrote—which Alexander and Julian thought worthy of conquest!

We rode along the canal mounds. When Akkerkooff bore S. 10° W. 6½ miles, we passed over the vestiges of ruins which are indicated by pottery and sepulchral vases, mounds of earth and bricks. These are the only materials that remain to indicate in this country, where the ancient cities stood.

In the evening we unloaded our camels, and turned them loose to graze on the odoriferous herbs growing around us. After dark we again mounted, and had not proceeded far before we got into a marsh, from which we could not extricate our camels. They lay down, and no exertion on our part could make them proceed. We experienced a terrific night. Heavy showers of rain in squalls, attended with lightning, lasted till morning. We made ourselves as snug as we could, lying down under the necks of the camels. This useful animal always presents its hind parts either to the wind or rain.

April 4th, at day light we were happy to pursue our journey. After 6 hours travelling to the N. W. over a swampy flat, we ascended a little, and the country became undulating and slightly gravelly. It was thickly clothed with the wormwood, and a few bushes of tamarisk. We passed some small lodgments of rain water. April 5th at day light we left our bivouack and pursued our journey towards the N. W. the country presenting the same features as yesterday afternoon. After ten hours we passed some Arab tombs called Burdeyeh. This is a favorite encamping spot of the Jerboi Arabs. At noon we passed two high conical hills called Mederah. These were situated to the eastward of some low table-land of calcareous formation, which appeared to extend to the northward. Here is an extensive grove of tamarisk, nourished by the water that flows from these heights. From this we entered a spacious plain, bounded on either side by low table heights, ending abruptly on their near sides. The ground under foot shewed calcareous rock and gypsum, in parts bare. In the afternoon we passed along the borders of a swamp, formed by the

\* Herodotus in Clio.

rain water from the high grounds. We had some trouble with our camels, from the dislike they have to tread on swampy ground. Our shaikh's camel fell, and he sprained his wrist, which caused pain for a few moments. He however mounted again, and we rode on. This accident materially affected us, as our camel driver was old and nearly blind, so the work of loading and unloading the camels, devolved upon us. After 10½ hours we bivouacked, and cooked some bread and coffee for supper, which we all partook of alike.

April 6th. The sun rose upon us well on our journey, riding over a plain bounded on the right by the same kind of hills as before. After four hours in a northerly direction we altered our course to west, which brought us to the banks of a small brook, and some groves of tamarisk. We had a great deal of trouble to get our camels over this, although it was but five feet deep. After crossing it, we rode to the south west and southward, along the borders of an extensive marsh of brackish water, strongly impregnated with nitre. The waters of this marsh yield a salt on evaporation, which is transported to Baghdad and Bussorah. The ground about the margin was incrustated with this mineral several inches deep. It will be observed that we have gone considerably to the northward of our direct course to Hit, which is W. N. W. from Baghdad. This detour is rendered unavoidable by the lake extending to the southward, and then being joined by patches of marsh, which extend below the parallel of Baghdad. After leaving the marsh about a couple of hours, we crossed the bed of a winter torrent, which runs N. W. and is deep and rocky. An hour in a south direction brought us to another turn of the same. At sunset we unloaded our camels in a ravine about five hundred yards wide. Our shaikh called all these wadies, but he knew them by no particular name.

April 7th. At day light we left our bivouack, and rode to the S. W. passing several ravines. After five hours in this direction, the country assumed a hilly aspect and we crossed no more ravines. The hills we have just come upon extend from Erzi to twenty miles below Hit, forming a principal feature in the geography of the country.

In Rennell's maps these hills are laid down from the information of Texeira and Irwin, under the name of the Abutal Mad hills. I could obtain from our guides no particular appellation for them. At noon we reached a high level from which we saw the Euphrates, winding through a narrow valley beautifully clothed with verdure. We then made a S. E. course, among hills bordering the river, till we descended to its banks. This was about four miles from Hit. The banks of the stream were overgrown with tamarisk, the garkah

and other low shrubs, as the willow, caper, and liquorice. The garkah (*Peganum retusum*) bears a small berry, which has an agreeable taste, and being very juicy may serve to allay thirst. The berry remains on the branches when the leaves have withered. The river at this part I judged two hundred yards wide; the current was running four and a quarter miles an hour. We rode along in the valley of the river which on this side is a quarter of a mile broad. The hills bounding this valley are about two hundred feet high, formed principally of calcareous rock, gravel, pudding stone, and indurated clay. They face the river in steep precipices.

We shortly entered some cultivated grounds. Our camels, which had hitherto been very tractable, now shewed signs of the greatest impatience and madness, starting from the direct road and endeavouring to make towards the hills. They soon grew furious, some of our party dismounted, tied their forelegs and tried to pacify them, but they suddenly started off at full gallop, two of them worked their legs loose, the others hopped off on three. I was the only one of the party mounted. The rate my camel went over such dreadfully uneven ground, made me glad to throw myself off, which I did without much injury. The smallest of our camels tumbled down a precipice, which put the beast wholly in our power, and we were glad to find it had not injured itself much. We started the Arabs off, mounted upon this, in search of the others. In what direction the run-away camels went, we could not see, as the hills soon hid them from our view.

We saved the bag that was on the back of the camel that fell, which luckily was the one that contained our papers and letters of credit, beside some cash — the most valuable part of our baggage, although not immediately useful. Our Arabs did not return this evening. We laid the bag under our heads and went to bed supperless, hoping the morrow would yield us better prospects.

April 8th. At ten A. M. our old blind camel driver returned, and helped us to carry our baggage down to the river. Here we found a few Fellahs, and the camel upon which our guides went in search of the runaways. The beast was quite mad, and was tied down by all four legs. The camel driver (Mahomed) now related to us the adventures of last night. It appeared, that they could not manage their camel, which took them quite out of their way. Abdulla had left him with the intention of going to Hit for the purpose of sending horsemen out to search for the camels. We remained here till the afternoon. The Fellahs hospitably shared some bread they had with us, of which we made a meal, the only food we have eaten since yesterday morning.

In the afternoon an Arab came from the town to inform us that Abdulla had reached Hit. We immediately mounted our baggage on the refractory camel, and led him on the road to Hit, which place was three miles and a half to the southward. From the bank opposite the town we were ferried across the river in a large ill-shaped vessel coated over with bitumen. Although so rude in construction it admirably served its intended purpose. The river here is about one hundred and sixty yards broad, and the current to-day four miles and a quarter an hour.

A stone built platform extends from the east bank two thirds across the river, its outer part supporting three water wheels, leaving, however, sufficient space on the west side of the stream for the passage of boats.

Abdulla met us on the opposite bank, and conducted us to the house of one of his tribe. The whole populace were assembled, along the banks of the river, and on the tops of the houses to see us, as our misfortunes had made a stir in the place. They readily offered to assist us in carrying our things up the streets, and appeared to shew much compassion for us in our distressed situation. A good supper of soup, camel's flesh, and truffles, made us forget the starvation we had suffered for two days. Till a late hour a large concourse of Arabs were assembled in the house to welcome us on our arrival. Coffee was served to all the guests, and was cooked on a fire in the middle of the room. The heat and smoke were intolerable. A boy sat in one corner pounding coffee, ringing the mortar with the pestle. This, and the roar of twenty persons talking, made me wish myself on the quiet, cool desert again. At midnight this revelry was succeeded by a young Bedouin performing on the Rababa. This rude instrument has but one string, tightened over a wooden frame, on which is stretched a piece of sheep skin. The plectrum is made of hair. The sound is harmonious. The Bedouins sang plaintive love ditties, till two in the morning, when our kind friends allowed us to rest ourselves.

April 9th. A physician attended Abdulla, and put a support of sticks to his arm. Some eggs beat up were made into a plaster and applied, with strict injunction that they were not to be removed, till the arm was well.

The horsemen that went in search of our camels returned. They were unsuccessful. Some supposed they had run back to Baghdad—others that they were captured by the Jerboi Arabs, who were encamped in the vicinity. However they were for ever lost to us, and with them some of my most useful and indispensable instruments.

We strolled about the town, accompanied by the chief tinker of

the place, who indeed was the only person here that we found who could speak Turkish. He proved a very intelligent, agreeable companion and we spent most of the day together.

Hit is supposed by Major Rennell and other geographers to be situated on the site of the ancient Is, which supplied the cement of bitumen used in the construction of the walls of Babylon, and was said to have been eight days' journey above that great city.\*

The present town occupies a steep isolated hill close to the western bank of the river, of about half a mile in circumference, and upwards of a hundred feet in height. The houses are constructed of stone, and, from the steep nature of the spot they are built upon, rise one above the other. At the base of the hill their gable ends join, which forms a tolerable defence. The town has two gates, one to the north, and the other on the opposite side. A few loop holes in the walls of the lower ranges of houses are the only defence; but this place is considered a stronghold by the people of the country. The number of houses is four hundred. On the top of the hill stands a mosque to which is attached a minaret of bad proportions.

The military force of the governor consists of sixty horse, and four hundred infantry, about a quarter of which are armed with fire arms. The shaikh of Hit is appointed by the Pasha of Baghdad, but sometimes the town and surrounding district is farmed to the Jerboi tribe. The inhabitants of Hit, are composed of Arabs natives of the town, and others that have separated from their tribes, and twelve families of Sabæans. The principal articles of commerce are grain, bitumen, salt, and lime. The bitumen is monopolised by the Pasha, who has an agent here to transmit it to Baghdad and Hilla. The demand for this article is very considerable. It is used in the construction of houses; for boats, &c. &c.

Many rafts come down the river laden with wood, cotton and wool. The former article I observed to be principally plane, poplar, ash, and tamarisk: the largest spars were five inches in diameter. The Asphaltum springs which have rendered this place conspicuous in history are situated three quarters of a mile to the west of the town. The country around is a flat desert, of a sandy soil, strewed with small flint and limestone pebbles. Tabular hills appear to the northward, but of no considerable height; to the west extends the desert of Syria, eastward the fertile land of Chaldaea, and southward flows the great river, laving the ruins of the once mighty capital of the east. About Hit

\* Hit is 160 miles, by the river, from Hilla, and direct 120. A day's journey in this country is considered to be not less than 20 miles..

the hills that bound the river may be said to terminate, still they continue a few miles to the southward.

The bitumen bubbles up in two places, where pits have been dug of about forty feet in diameter. The water that rises with this substance is of a dark colour, having a sulphureous smell and saline taste. The aqueous portion is carried off by a subterranean duct, and runs into small beds banked round, and on exposure to a powerful sun yields a considerable residue of salt. The resin that swims on the surface of the water in the pit, is skimmed off and laid out to cool, and is immediately fit for use, and without further preparation forms the bitumen sold in the markets.\* The price is very variable, depending much on the state of the country. The quantity procured from these pits is very considerable. There are other bitumen springs in Mesopotamia, both on the Tigris and on this river. The springs of Hit produce no naphtha, but some of the others do. The hills of Erzi abound in gypsum which is calcined, the refuse of the bitumen being used for fuel.

The cultivated ground in the vicinity of Hit and along the valley of the river is celebrated for its fertility, producing the best corn in the country, and from the easy method of watering the grounds, agriculture is considerably facilitated, and the produce cheapened.

These articles of commerce are shipped in boats, or upon rafts of inflated skins, and floated to Felugia and Hilla. The caravans established between Damascus and the east cross the river here. On these the shaikh levies an arbitrary exaction. The arrival of a caravan is a source of considerable emolument to the people of Hit, which they derive from the ferry, from the sale of provisions, and from plunder; which last is not the least. The ferry boat holds four camels, and by this single craft the whole caravan, consisting of a thousand camels, and some hundred tons of the richest merchandise is conveyed across this rapid river. Fourteen days are generally spent before it is assembled on the opposite bank. The delay is beneficial to the people of Hit. The Pasha used formerly to oblige the shaikh to keep three ferry boats, but they now evade this regulation. The river is more than two spears deep.† I crossed the stream to measure it. A spear's depth is a common expression used by the Arabs to denote the depth of water. The deep water channel is about seventy feet wide.

The water for irrigation is raised by wheels which are supported by stone buildings projecting into the stream, so as to place the

\* Mr. Rich describes the bitumen pits at Hit, as having two sources divided by a wall, on one side of which bitumen bubbles up and on the other oil of naphtha.

† A spear is considered seven feet.



wheels in the force of the current. Upon the rim of these wheels are fixed small bell-shaped earthenware pots, each holding about three quarters of a gallon. The force of the current acting against the mouth of the pots fills them, and gives a sufficient impetus to cause the wheel to revolve. The pots as they become inverted, empty the water into a trough on the top of the building. It is then at the command of the Jabourer, and led over the land in small channels. I found one of these wheels to be 27 feet in diameter.

The current averages four and a half miles, which appears its utmost velocity. The river was very high and the wheels revolved once in thirty seconds. Each wheel has one hundred pots which will raise one hundred and twenty gallons a minute, but from their bad construction not more than 60 gallons are raised in the above time; some of these structures extend nearly half across the stream and have five wheels; they are of great antiquity.\*

We purchased three camels, one of which had a young one, which served us for a parting repast with our kind hosts.

April 11th. We left the town at daylight accompanied by a considerable number of the Agail tribe, who are in the service of the shaikh.†

These men, out of regard for Abdulla, attended us to Kobaise which is twelve miles from Hit. News had been brought in during the last evening that a marauding party of the Jerboi Arabs had been seen on this road.

At an hour and a half from Hit, we passed some ruins on our left, called Marmora.

Our road was over a beaten track overgrown with a few stunted bushes. We passed several donkeys laden with salt, which the Arabs said was procured from lodgments of water a short distance off. After travelling four hours and a half we entered the town of Kobaise. This place is about the size of Hit, surrounded by a mud wall with turrets. A large grove of date palms flourish to the northward, just without the walls.

The inhabitants are Fellahs and weavers. They cultivate the grounds on the river, to which place they move in the summer and reside in temporary habitations. Half a mile to the N. W. there is a sulphurous spring, which flows in three small streams towards‡ the river. The water is not so much impregnated with the mineral, as to prevent it

\* Alexander's Historians thought these ramparts.

† The Agail tribe are from Nejid.

‡ In the old maps a river is placed here, and Herodotus says the bitumen was carried down a river near Is.

being used to irrigate the date groves. The water in the basin of the spring is tepid. We stopped in the house of one of the Agail guard of this place, which was certainly a miserable hovel, but the hospitality of the owner made up for all want of comfort.

In the evening we quitted, and rode for a couple of hours to the westward, when we fed the camels on some barley, and lay down to rest.

April 12th. At four o'clock in the morning we left our ground, and rode to the westward. Some hills, tabled on their summits appeared about four miles to the northward of us, and continued for several miles. The desert partridge, called Guttah were very numerous. Their eggs were deposited under almost every bush. Numerous vultures and small eagles were either hovering over our heads, or walking about. I saw the former breaking the eggs. We broke several, and found the young birds were just ready to start from the shell. These birds of prey appeared to be attracted by the flight of the partridge, and the eggs. The ground was overgrown with the same wild flowers as in the Zezeerah.

At noon we saw some persons a considerable way to the southward of us. There is an Arab proverb which says, "every man met in the desert is an enemy in heart." So we started off as fast as our camels could carry us to the northward, till finding they neared us fast we made a bold stand. We had no arms, and if we had we dared not have used them. They proved to be eleven of the Seleab, a peaceful tribe that live by hunting, not owning large flocks. They were all armed, and the matches of their guns lighted; a most ragged ill looking set they appeared, and I have no doubt would have robbed us had we been further from Hit. They begged hard for money and flour, after some trouble we got away with only the loss of a gallon of water, which they took by force. After travelling for twelve and three quarter hours we found ourselves in a level open plain unbounded as far as we could see on all sides. We bivouacked in the midst of this, and made a small fire in a hole in the ground, in which we baked some bread. The camel thorn was very abundant. This afforded food for the camels, and the withered bushes made our fire. The shrub is about three feet high and thick set. Our camels were let loose when we bivouacked, and when the sun set they invariably came and laid themselves down by us.

13th. Our journey to day was very miserable. A high wind with rain blew in our faces the whole day. After nine hours over a dead waste we were glad to bivouack. The rain prevented our lighting a fire, so we made our supper of dates. We had one luxury, which

was coffee; the rain ceasing about midnight, we managed to cook some, and dry our clothes.

14th. We were on our journey before daylight. Our water was finished yesterday evening. Four hours brought us to a ravine in which we found some rain water. We filled our skins and cooked some bread. It set in a rainy day again which obliged us to encamp at three in the afternoon.

We sat down to leeward of our camels and made a kind of tent of our cloaks; but it rained hard the whole night, which drenched us to the skin.

15th. Friday. After two hours and twenty minutes, usually travelling directly west, we reached a large body of running water, flowing to the north-eastward at the rate of upwards of a mile an hour. After wading up to our knees through this for an hour, we reached a small rising ground, where we dried our clothes and cooked some bread and coffee.

The ground we have been passing is overgrown with red poppies and thistles, a few crocuses, the chamomile and camethorn. As the rain had ceased, the moving lake had passed away to the N. E. and was now nearly out of sight. It was about eight miles broad, and extended in length as far as I could see. When we waded through it, it was knee deep.

The moving lake, I fancy, must continue its course till either soaked into the soil, or it settles in some low ground; the desert here is not even enough for it to stand, for we have been evidently ascending a little.

The ground here is a hard sandy clay, with gravel of flint and limestone. This soil appears as susceptible of cultivation as any I ever trod upon. It is not the parched barren sandy desert where the traveller is in danger of being buried in whirlwinds of sand. The Arabs particularly distinguish this waste, from the sandy deserts of Oman, or the Great Sahara, which are termed Bareyeh. Such as we are now on at present, where the camel finds sufficient herbs for food, and the traveller, bushes to light a fire with, is called Sultanie by way of eminence.

16th. The same monotonous travelling. After the sixth hour of our journey we passed a small rivulet of rain water. The country now undulates. Shortly after we came upon some small calcareous hills, isolated, with table tops. These were about thirty feet high. On the 17th the country became hilly, with many broken ravines. The surface is thickly strewed with flint and limestone. The flint stones were very sharp edged, and had all the appearance as if broken purposely in small pieces about the size of musket flints.

18th. For the first four hours of this day's journey the country was gently undulating; after which it became hilly. About an hour after this, we came to a small lodgment of rain water from which we filled our water skins. We had just passed some remarkable conical hills with slabs of calcareous stone on their summits. The ground about was very thickly overgrown with chamomile and poppy. The camels appeared very fond of the former, and devoured it in great quantities, every few minutes stretching down their long necks and sweeping up a great mouthful.

Friday, 19th. At day dawn we left our ground and continued our way to the westward. The country slightly undulating, with patches of flint and limestone on the surface.

We appear to have been gradually ascending these last few days. The nights have become very cold, and strong westerly winds prevail. This may partly be accounted for by the high ground we are upon. We found the low diet we are on, agree with us extremely well. Our Bedouin companions eat very sparingly which we also tried to do at their recommendation, but we always found ourselves half famished before evening. Our flour from Jowarree, when made into bread was exceedingly black; at first it made our gums sore. As we had intrusted the commissariate department to Abdulla, we brought nothing ourselves but dates from Hit.

20th. Started at dawn of day. The morning was very cold, a high westerly wind blowing in our faces.

The country has become exceedingly level and continues so as far as the eye can see. We made this day's journey but nine hours and a half, as the wind blew so strong in the afternoon that the camels would not go on.

It blew a perfect hurricane during the night; we took shelter to leeward of the camels.

21st We left our bivouack at dawn of day, and travelled over a level, dreary waste. We saw numerous flocks of deer scudding in all directions, scared at our approach. The camel thorn was very profuse today. Under the lee of many of these bushes, we saw pretty little fawns, some just born, others a day or so old. This was manna to us! We could only manage to capture those that were just born, the others were too swift for us. We could have taken hundreds of these poor creatures — but ten sufficed us. We cut their throats, and hung them on our camels. The anxious mothers followed quite close to us, reckless of their own safety, for many miles, keeping their murdered offspring in view. When we bivouacked in the evening, a large fire was made in a hole in the ground, which we dug with our knives.

On the embers we roasted five of the fawns. We enjoyed this day's dinner. Our usual employment after bivouacking for the day, was first to gather the dry bushes of the camelthorn. Abdulla, who had only one arm that he could use, blew the fire; Mahomed the camel driver made the bread, which he kneaded on a piece of mat; Elliot made coffee; while I wrote down the occurrences of the day in the journal. After supper we drank coffee, smoked and chatted a little, and shortly retired to rest — sure of the purest air and soundest sleep.

22nd. We were on our journey by five and shortly passed a lodgment of rain water, but exceedingly brackish, the ground being impregnated with salt. After the fifth hour of today's journey the country assumed an undulating aspect. We were now eleven hours south of Tadmor. After the ninth hour of our journey we reached a small collection of rainwater. This was tolerably sweet, so we filled our water skins. This evening finished our venison.

Saturday, 23d. At 4 A. M. we mounted and rode to the westward. At sunrise to our great joy we descried the hills of Syria bearing W. N. W. For the sight of these for three days past, we had been straining our eyes. I can well fancy the inexpressible joy of the Ten Thousand when they saw the sea, for like them, by getting sight of a particular object we knew our troubles and fatigues were near to a close. In the afternoon the ranges appeared more to the southward. At sunset we anchored our ships, if I may use that nautical expression. I never before experienced travelling so like a voyage at sea. The camel too is called the ship of the desert, *Merkab al Bareyeh*. We here too, as in a ship, require a knowledge of the different hillocks and ravines, and water stations, without which it would be impossible to cross this expansive waste. The navigation of the desert, is by the stars and the sun. Our guides knew the true west, and indeed all the points of the compass, by merely taking a glance at the sun by day, and the stars at night. Abdulla was somewhat a proficient in astronomy; he knew the names of a great number of the constellations, the mansions of the sun and moon.

Sunday, 24th, To day we rode to the W. N. W. The country between us and the base of the Syrian hills was much lower than the part we have been travelling over. Soon our descent was very apparent. This clearly proves that the greater part of this desert forms a plateau more elevated than either Syria or Mesopotamia. After ten hours we directed our course to the southward; a particular indentation in the hills appeared now abreast of us. We were at this time about four miles from their base. After four hours

travelling in the direction of this range of hills we passed through an ancient Saracen burjal ground. Our guide terms these hills Jebel Shaum.

For the last hour and a half of this day's journey we had an extensive marsh on our left, called Bahr al Merje. The journey today was sixteen hours.

At night we reached the village of Mucksooreyeh. We had no sooner entered the place, than a little girl informed us that it was full of Arabs of the Beni Suckr tribe, who were here on a marauding expedition.

The hospitality of the people of this place we soon experienced. In half an hour we were eating Burgoul\* and mutton stew, in a snug little house, the mistress of which was making up beds for our party.

The Shaikh of the Beni Suckr demanded a hundred dollars for our safety, otherwise we must follow them to their camp. Our value at this time, camels, money and all might be about ten dollars. After detaining us two days he was glad to take a dollar. We never troubled ourselves about the constant altercation between the Arabs and our guides. The ruin of a large temple that stands in the midst of the village afforded us sufficient occupation during our stay here.

25th. Mucksooreyeh is a small village situated on the northern limit of the Bahr al Merje, and close to the foot of the low hills of Anti Libanus. It is surrounded by extensive corn fields, and the village is supplied with delicious water from several springs at the foot of the hills. The number of houses is about eighty, the inhabitants are fellahs who either rent or till the grounds for hire; some of the lands belong to the mosques of Damascus. This is the most easterly village in the vale of Damascus, and as bordering on the desert is subject to the incursions of marauding tribes.† The houses are well built and neatly plastered on the inside. The females of this village were very handsome, being a caste between the Arab and Turk. Their dress was Damascene. The beautifully shaped foot and ankle, in which all orientals so much excel, were adorned with the usual golden fetters. Their hands and toes were deeply dyed with henna.

I observed no reserve on the part of the woman, and no jealousy on the part of the husband. But these poor villagers are untainted with, and know but little of, the vice of capitals, which makes bolts so necessary to the peace of the husband.

\* Wheat cooked like rice.

† With whom they compromise. I am surprised how a village can exist under this double extortion of Turks and Arabs.

In the midst of the village\* stands a temple of the Corinthian order. This beautiful remnant of antiquity is partly hidden by a few miserable houses and sheds around its base, but its towering height shews above all. The building is sixty five feet by forty five, and about sixty in height; each end is ornamented by a well carved pediment.

The entrances have been filled up by masonry, to convert it into a church or castle.

The interior and exterior are ornamented with Corinthian pilasters. The walls of the sanctum are covered with Greek inscriptions, but the place was too dark to copy them. On the opposite end, a gallery runs across, which was ornamented with small porphyry pillars, one of which remains.

The whole structure is built of hard limestone, and bears the traces of having been very elaborately finished. The stone is deeply and sharply cut, and highly polished. The time of its erection may be fixed about the same age as that of the temple of Balbec.

On the first general spread of Christianity, all the temples so long the scene of abominable rites, were consecrated and fitted for Christian worship. Then again on the invasions of the Saracens, they were stripped of their ornaments, relics, and pictures.

It was used as a castle afterwards, and an Arabic inscription has been engraved over the porch. We observed a variety of ruins about this place—pieces of statues, sarcophagi, intabatures, and friezes.

We departed on the 27th and our Arab friends returned to their desert haunts. We travelled to the west, with a range of hills on our right.

Three hours and a half brought us to the village of Athera. The country all around is most beautifully clothed with lively green, from crops of wheat and barley which are now about four feet high.

The valley of Shaum as we rode on, assumed the most picturesque appearance. The high mountains of Lebanon whose peaks are beautifully capped with snow; one in particular hung over Damascus. The simile of Solomon recurred to me, "And thine nose is like the tower of Lebanon that overlooks Damascus." In the far distance the range of Hermon of old, added sublimity to the scene. We passed many pretty villages, the names of which I have given below. †

The vale of Damascus does not belie the fancy of oriental poesy; and it is the only place, I believe, which does not. "The prophet

\* Mucksooreyeh in Arabic signifies *broken place*.

† Rahoun, 3' W. N. W. of Athera Sultanee 2' N. N. W. of Rahoun. Douma, 2½' W. by S. of Sultanee. Arousta, W. of Douma.

sighed and turned his head from it."\* Our road was edged with fine old olive trees and lastly with fruit trees and vines. The Baradee is led over the plain in a thousand small water courses and canals, which are crossed by old Roman bridges. When within a mile of the town, the traveller finds himself on a paved road, shaded by wide spreading walnut and other fruit trees. The beautiful Lombardy poplar is hung with vines, which climb to its very summit.

We entered the city of Damascus,  $8\frac{1}{2}$  hours from Mucksooreyeh. After a little trouble we procured a lodging, and enjoyed the luxury of a bath; and thus we accomplished our journey, without suffering much either from fatigue or sickness.

Beirout, Syria, June 1831.

#### V. — *Note on the Hill of Powanghur.* By F. S. Arnott, M. D.

[Presented by Government.]

POWANGHUR.—The hill fort of Powanghur is situated to the eastward of Baroda, and is distant from it about twenty-eight miles, and about seventy miles from the head of the gulf of Cambay. It is an isolated hill surrounded by extensive plains, from which it rises abruptly to the height of about 2,400 feet, and is about 2,800 above the level of the sea: to the eastward lie the vast Barriah jungles, and it seems to form the boundary between them and the clear open country stretching westward to Tunkaria Bunder.

There is a cart road from Baroda, which leads in many places, through a beautiful and interesting country, winding along the base of the hills to the ancient and once magnificent, but now nearly deserted, city of Champanecr, which lies on its eastern side; here the cart road terminates and the ascent commences by a foot path, ragged, stony, and irregular, but which might very easily be much improved. The ascent is long and circuitous, but in very few places steep, so that a palanqueen, even in the present state of the road, can be carried up without much difficulty.

The top of the hill is of an irregular oblong shape, running north and south, about a mile in length and a quarter of a mile wide. Its northern extremity is covered with a thin loose soil, apparently covering in many places ancient ruins, tanks, &c. and is at this season devoid of vegetation, though the grass seems to spring up luxuriant-

\* Mahomed is said never to have visited Damascus from a fear that he should have been tempted by a more earthly paradise than he awarded to himself hereafter.



ly in the rains. On the east side of this part of the hill are the remains of many beautifully executed ancient Jain temples, and on the west side over-looking a tremendous precipice, are some Mussulman buildings of more modern date, and supposed to have been used as granaries. The space between is uneven, and, in many places, covered with large blocks of basalt.

The southern extremity is more uneven, and from its centre rises an immense peak of solid rock, about 250 feet above the level of the hill. The ascent to the top of this is by a flight of stone steps, and on its summit are Hindu and Mahomedan temples. On the table land around the bottom of this peak, are two or three Banyan trees, with a number of prickly pear and carinda bushes, and thousands of immense blocks of rock lie scattered every where. At the bottom of the steps there is an excavated tank, containing, at the time of our visit, a considerable quantity of muddy, but not ill tasted water. To the north are two others built up, also containing water of perhaps a better description. But the best and purest water, is found at a spring about half way down the hill near the lower fort.

We took up our quarters in the granaries [tombs ?] which form a range of buildings that might easily be converted into comfortable habitations, having walls of immense thickness with domes also very thick : each room is about 21 feet square, and of proportionate height; there is one small door-way in the east front of each, with a small vent in the dome above it. The walls are without plaster, the floors are worn and broken, and there is no door to any of them. We were fortunately in these during the hottest days of the last hot weather, and throughout the whole time, the temperature was moderate, as the highest point at which the thermometer stood on the warmest day was 87°; it being about the same time in camp, at Baroda, 105°. We had no tattles, and used no means to cool the rooms, and the average maximum temperature during our stay, may be stated at 83°. The thermometer in the open air, was less accurately observed, but it never rose above 97°, and the average maximum height was probably about 94°. To what it fell in the night, I did not ascertain.

My visit was so short that I had little time to prove the correctness of my thermometrical observations, but I may mention that the late Doctor Stuart, who visited the fort at the same season of the year in 1836, states the thermometer never to have risen above 82°. But taking the most unfavorable observations as the most correct, it will be evident that, as a convalescent station, it possesses advantages well worthy of consideration. With a temperature from 15 to 20 degrees

below that of the plain, its pure air, constant light breeze from the south-west, wholesome water, cool and bracing nights, magnificent scenery, and accommodation that might, at a small expense, be rendered very comfortable, I consider it well adapted as a place of resort for those suffering from the debilitating climate and diseases of Guzerat, and feel convinced that it may be safely recommended, and would be often resorted to in cases of constitutional debility, or slow recovery from disease, when a longer trip promising no greater advantages might be inconvenient or impracticable. To the inhabitants of Baroda it appears to me to possess incalculable advantages from its extreme convenience and proximity to that station, and though I will not enter into comparisons between it and the sea coast, I may add that there are many forms of disease for which it is equally beneficial.

Earlier in the season than the month of February, it would not be advisable to resort to it, as the exhalations from the Barriah jungle, carried along by the east winds, that at that season prevail, might, in sweeping over it, produce deleterious effects; however, up to the time mentioned, the heat in the plain is sufficiently tolerable to render an earlier change unnecessary.

Camp, Baroda, 18th June, 1838.

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## VI.—*Note on the Lake of Loonar.* By Professor A. B. Orlebar.

In the Edinburgh Philosophical journal for 1824 there is an account by Captain Alexander of this lake, and also a plate which is sufficiently accurate to give an idea of its general appearance, as it opens at the feet of the traveller. This lake occupies the larger portion of the bottom of an immense hollow in the great trap formation, which constitutes the whole of the central portion of the Bombay Presidency, and extends eastward into the Nizam's territories. Advancing from the Sahyadree range eastwardly, the high walls of trap which characterize the boundaries of the Deccan plains, gradually diminish in height. At Loonar they are not more than a hundred feet high, and onwards towards the lake, the country is one extensive table-land varied by undulating hills, but without the walls of trap. Hereabouts siliceous minerals appear to take the place of the zeolites which abound in the neighbourhood of the ghauts. Loonar is about 50 miles eastward of Jalna, and a little more south-east of Adjunta. The hollow is of the shape of the Ling as usually repre-

sented by the Hindoos. Which they seem to have observed, for they have built a temple to Mahdeo at each extremity. A is the south-west, and B the north-east extremity of a line which divides the hollow into two nearly symmetrical halves. The ridge of the circle A C D is slightly elevated above the surrounding country, and is at its greatest height above A, in all parts it is sufficiently elevated to prevent the rain water from draining in. At E a wall has been built up, as also a mound at B, in which places there is no natural protection against the rain water. C D B is a large ravine, at the extremity B of which, is the temple in the foreground of Captain Alexander's sketch, and which has evidently stretched beyond B a few yards, but, as before noticed, this has been artificially filled up. E and F are two small ravines which are at right angles to the large one. The circumference of the circular part may be five miles, but as my time was very limited I was not able to measure it except with my eye, by which I believe I obtained its dimensions with sufficient accuracy to answer any useful purpose. The sides which are nearly perpendicular seemed to me about 300 \* feet. The lake occupies the portion towards A. It seemed to shelve gradually off, and I was informed is only 10 feet in the deepest part. My visit was in January 1837, so that the lake must have been at its mean depth. Rain water is carefully excluded, as above stated; but there is a constant flow of water from an artificial stone mouth at E, the source of which I could not ascertain.

The trap rock which forms the sides and bottom of the hollow, presents several varieties. The undecomposed trap rock is generally one having both a porphyritic and an amygdaloidal character. Both the crystals of the porphyry and the contents of the amygdaloidal cavities are honey colored augite, which often gives a yellowish tinge to the basalt which forms the base. The crystals have generally a star-like arrangement, and the amygdaloidal cavities are generally quite spherical.

The trap rock may be here observed in all its various stages of decomposition. In this as well as innumerable other spots which I have noticed in various and distant parts of the Deccan basalt, the rock appears to have been originally solid, in which the first stage of decomposition is splitting into prisms more or less hexagonal, and whose axes are perpendicular to the horizontal sides of the beds † of trap. The prisms divide into spheroids whose minor axes are in the axis of the prism. These spheroids gradually round, until the whole mass be-

\* 500 Captain Alexander.

† Strata, Col. Sykes.

comes what is commonly called *mooram*. The axes of the prisms and of the spheroids on the sides of the lake were all slightly inclined inwards towards the centre of the lake. And as the prisms, as I before noticed, have always their axes perpendicular to the strata, it follows that the strata must have been heaved up about the centre of the lake. If such had been the case the formation of the hollow is obvious. When the bed had been heaved up in the crown A B C, the central part at B, on the force of up heaving subsiding, would again sink until it formed a wedge at D and so preserved the rock at A and C in an inclined position. The slight elevation round the brim agrees exactly with this supposition. Besides the basalt above-mentioned, I found a mass of amygdaloid whose base was highly ferruginous; and there also was, beyond my reach, a bed of red ochre, which in various parts of the Deccan, from the neighbourhood of Kolhar on the Krishna to Jooneer and to Adjuntah, I have observed always to occupy the second bed from the top, and frequently passing into a clay to become a lodgement for water, as at Jooneer, when the wells and reservoir of water are dug down to it. Its position on the sides of the Loonar hollow agreed exactly with my other observations.

The bottom of the lake is composed of black soil exactly resembling the black soil of the Deccan. On this as the water diminishes in the dry season, the salt is deposited. The salt appeared both to myself and to my friend Mr. Heddle, in independant examinations to be entirely carbonate of soda, although Captain Alexander has given so contradictory an analysis.\* A few small fishes are said to be procurable from it, and I observed several water birds flying about. The salt is sold in the town at from 24 to 12 rupees a khandy according to its quality.

The part of the bottom towards C D is cultivated ; and the soil, similar to the soil of the neighbourhood, abounds with siliceous minerals round about, and close to the base, the principal trees were tamarind and the *Dalbergia arborea*, and in this girdle was the cultivated soil (above-mentioned) in which I understood all the Deccan grains would grow freely. Within this, was another girdle of date trees, (or fan palms, for I am obliged to trust to my recollection, not having noted it down) which mark the limit to which the water rises. Palm trees never grow, I believe, in the Deccan except in the neighbourhood

\* Captain Alexander's Analysis is,  
 Muriate of Soda, 20. 82.  
 Muriate of Lime, 10. 60.  
 Muriate of Magnesia, 6. 10.

or along the banks of salt rivulets; of which there are several in the immediate vicinity of Loonar.

This hollow has been supposed to be the crater of an extinct volcano; but although I searched diligently, I could find not a trace of any rock but trap. If there had been an eruption there, it must have been one of trap, but the trap had not erupted from the neighbourhood, for the amygdaloidal cavities are all round and not at all elliptical which they must have been had they been formed in a rapidly flowing stream of lava. And also the crystals are generally arranged in a starlike form, as if in a state of quiet they had been able to submit to their mutual attractions, which they could not have done had they been in a fluid rushing fresh from a crater. Besides which, all the phenomena are fully explained upon the supposition of an upheaving and consequent depression of the trap rock supporting a bed of black soil containing salt. It should also be observed that the line A, B, (Fig 1.) is nearly perpendicular to the principal direction of the Syhadree.

## VII.—*On the use of common Thermometers to determine heights.* By Lieutenant Colonel W. H. Sykes, F. R. S.

[Reprinted from the Journal of the Royal Geographical Society.]

Having been recently applied to by two gentlemen about to travel—the one in Africa and the other in Asia Minor—for a description of the thermometers and apparatus used by myself for some years in India for determining heights by the boiling temperature of water, I have ventured to believe that a brief account of a process which I found to produce results sufficiently near to the truth for most practical purposes, may not be unacceptable to some members of the Society, particularly as I carried on my barometrical observations contemporaneously, and thereby obtained data for fixing the value of certain points on the thermometric scale. To determine heights accurately, good barometers are necessary, which have been carefully compared with a standard barometer; the observations must be taken simultaneously at the upper and lower stations, and the temperature of the mercury and the air, and the hygrometric state of the latter, must be noted. Heights so determined, when tested again in the same or succeeding years, I have rarely found to vary more than 10 or 20 feet in 4000 or 5000. When barometers are used which have not been previously compared with a standard, when the observations are not simultaneous, and when the pressure and temperature at the level of

the sea are *assumed*, the results may by accident be near to the truth, but they will usually be from 100 to 300 feet wrong,—at least such is the result of my experience within the tropics. But good barometers are very costly; they are troublesome to carry, are particularly exposed to accident on a journey, and get out of order by the escape of the mercury, which being frequently unobserved, the barometer continues to be used as if it were correct. The late Archdeacon Wollaston, aware of these facts, invented the thermometric barometer to supply the place of the ordinary barometer. This instrument is very sensible but is very fragile from the great weight of the bulb compared with the slenderness of the stem; moreover, there are some complex accompaniments, and the instrument is also expensive: in short I found it not fit for *rough work* out-of-doors, having had three destroyed at the outset of my labours; and the same opinion is expressed by Mr. James Prinsep, of Calcutta, who is well known for the practical application of his scientific knowledge. I had then recourse to common thermometers, and, with certain precautions in their use, found them answer my purpose sufficiently well. A tin shaving-pot was my boiler; dry sticks and pure water were usually to be had, and by the time my barometers were settled I was ready to take the boiling temperature. The following is a sketch of the apparatus.\*

It will be seen that the chief part of the scale usually attached to the thermometer is removed, only so much of it being left as may be desirable: I however permitted the brass scale of one of my thermometers to remain, and I did not discover that it was the cause of error. Previously to taking the thermometers inland, it is necessary to ascertain their boiling points at the level of the sea; for in many instances the scales are so carelessly applied, that a thermometer may indicate a boiling temperature of  $213^{\circ}$   $214^{\circ}$  or  $215$  at the level of the sea; one of mine stood at  $214.2$  when water boiled. Nevertheless, by making a deduction of  $2^{\circ}$   $2'$  in all observations, the indications rarely differed five-hundredths of a degree from the other thermometer, of which the boiling point was  $212^{\circ}$ : the temperature of the air and the height of the barometer at the time the *verification* of the thermometers is made must be noted. The following is the manner in which my observations were taken:—from four to five inches of *pure* water were put into the tin pot; the thermometer was fitted into the aperture in the lid of the sliding tube by means of a collar of cork; the tin tube was then pushed up or down to admit of the bulb of the thermometer, being about *two inches*,

\* See plate.

above the bottom of the pot. Violent ebullition was continued for ten minutes or a quarter of an hour, and the height of the mercury was repeatedly ascertained during that time, and the temperature of the air was noticed. Similar operations were repeated with a *second* thermometer, for it is never safe to rely upon *one* instrument. Having obtained the boiling points, it remains to determine the value of the indication of diminished pressure when the observations are taken above the level of the sea. The elastic tension of steam at different points on the thermometric scale has been determined by experiment, but not at regular intervals on the scale, nor with similar results, by different persons; tables, therefore, computed from the formulæ of the various experimenters do not accord; but, in three tables which I have in my possession, the heights computed by them when compared with heights determined by corresponding barometrical observations, with previously compared barometers, (the only satisfactory way to ascertain heights not taken trigonometrically,) approximate sufficiently near for all practical purposes where great accuracy is not desired. These tables, however, differ slightly from each other.

The table which first came into my hands appeared anonymously in the Madras Gazette for 1824. In 1826 an able friend, Lieutenant Robinson, of the Indian Navy, who entered warmly into my views to determine heights by common thermometers, thought he could improve upon the table I was using, and accordingly made a new computation; the third table came under my notice much more recently than the two former. It is computed by Mr. James Prinsep, of Calcutta, Secretary of the Asiatic Society of Bengal, a gentleman distinguished for his scientific research. He published it in the journal of the Society. To admit of a just estimate being formed of the value of these tables—of the value of corresponding barometrical observations, made with due precautions, although with different coadjutors and different instruments—of the value of barometrical observations, with an assumed pressure and temperature, at the level of the sea—of the value of thermometrical compared with barometrical observations—out of many hundred heights determined in various ways, I have taken many at random, (the number it appears is eighty-eight,) and I have put them into juxtaposition in a tabular form. In thermometric heights the elements at the level of the sea were a boiling temperature of  $212^{\circ}$  Fahr. and a mean temperature of the air of  $82^{\circ}$ . The *assumed* pressure in heights determined barometrically, without corresponding observations, was 30 inches; mean temperature  $82^{\circ}$ . In looking over the tabulated results, I was a good deal surprised to find that in no instance, by

whatever method determined, do the barometric differences in height exceed 127 feet, and this only by comparing the highest indications with an assumed pressure with the lowest indications of corresponding observations. It will be seen that the various tables for determining heights thermometrically, with certain exceptions, do not differ very *materially* in their results from each other, nor from corresponding barometric observations; the formulæ on which they are founded may therefore be considered, on the whole, sufficiently accurate for the present state of our knowledge.

Lieutenant Robinson's and Mr. Prinsep's tables give close approximations to each other in their results, but they are as much below the corresponding barometric observations, which I consider the true heights, as the results by the Madras table are above the true heights. Some of them curiously coincide within a foot or two of the heights determined by corresponding barometrical observations, but this coincidence must be the result of mere accident. Taking the mean of all the thermometric observations at a station calculated by the three tables, and the mean of all the corresponding barometric observations at the same place, the utmost difference is 107 feet in less than 600; and the least difference is 8 feet in about 3000; but, as the thermometric heights in which the difference of 107 feet occurs were single observations, made by a gentleman who had newly begun to use his thermometers, they may be looked upon as probably less accurate than subsequent trials would have made them. This is scarcely an unjust inference, as it will be seen that the next greatest difference made by the same gentleman was only 24 feet in 4490. It must be admitted however that this amount of error is just as likely to occur in heights of 100 feet as in those of 10,000. My thermometers were not graduated to less than half-degrees, and long practice enabled me to determine the height of the mercury in the stem to one twentieth of a degree; but I would recommend thermometers being used in which the degrees are graduated to fifths or tenths of a degree. On the whole, I think the results of six years' experience justify me in saying, that common thermometers may be satisfactorily used to supply the place of barometers in measuring heights where great accuracy is not required, and it will be recollected that what is usually looked upon as a difficult and troublesome operation with barometers, will be attainable by any person who carries with him a couple of thermometers, the requisite tin pot, and the tables, and who is master of the simplest rules of arithmetic.

Of the three tables in my possession I have chosen Mr. Prinsep's to submit to the Society, from their perspicuity and the facilities



they offer for the conversion of boiling temperatures into heights with very little trouble; but a glance over the figures in my tables of altitudes will show that the tables are susceptible of considerable improvement, for, with two exceptions, all the heights deduced from Mr. Prinsep's and Lieutenant Robinson's are much below those determined by simultaneous observations with good barometers; and I join with Mr. Prinsep in expressing a hope that every traveller boiling his thermometers will at the same time, if he possess a barometer, make a record of its indications, and thus render essential service to physics by fixing so many points on the scale of the elastic tension of steam at different temperatures.



TABLE 1.

*To find the Barometric pressure and elevation corresponding to any observed temperature of boiling water between 214° and 180°.*

Boiling point of water.	Barometer modified from Tre-gold's Formula.	Logarithmic differences or Fathoms.	Total Altitude from 30.00, in. or the level of the Sea.	Value of each degree in feet of Altitude.	Proportional part for one tenth of a degree.
°			Feet.	Feet.	Feet.
214	31.19	00.84.3	—1013		“
213	30.59	84.5	507	—505	“
212	30.00	84.9	0	—507	“
211	29.42	85.2	+509	+509	51
210	28.85	85.5	1021	511	“
209	28.20	85.8	1534	513	“
208	27.73	86.2	2049	515	“
207	27.18	86.6	2566	517	52
206	26.64	87.1	3085	519	“
205	26.11	87.5	3607	522	“
204	25.59	87.8	4131	524	“
203	25.08	88.1	4657	526	“
202	24.58	88.5	5185	528	53
201	24.08	88.9	5716	531	“
200	23.59	89.3	6250	533	“
199	23.11	89.7	6786	536	“
198	22.64	90.1	7324	538	54
197	22.17	90.5	7864	541	“
196	21.71	91.0	8407	543	“
195	21.26	91.4	8953	546	“
194	20.82	91.8	9502	548	55
193	20.39	92.2	10053	551	“
192	19.96	92.6	10606	553	“
191	19.54	93.0	11161	556	“
190	19.13	93.4	11719	558	56
189	18.72	93.8	12280	560	“
188	18.32	94.2	12843	563	“
187	17.93	94.6	13408	565	57
186	17.54	95.3	13977	569	“
185	17.16	95.9	14548	572	58
184	16.79	96.4	15124	575	“
183	16.42	96.9	15702	578	“
182	16.06	97.4	16284	581	“
181	15.70	97.9	16868	584	“
180	15.35		17455	587	59

The fourth column gives the heights in feet.

TABLE 2.

*Table of multipliers to correct the approximate height for the temperature of the air.*

Temperature of the air.	Multiplier.	Temperature of the Air.	Multiplier.	Temperature of the Air.	Multiplier.
32	1.000	52	1.042	72	1.083
33	1.002	53	1.044	73	1.085
34	1.004	54	1.046	74	1.087
35	1.006	55	1.048	75	1.089
36	1.008	56	1.050	76	1.091
37	1.010	57	1.052	77	1.094
38	1.012	58	1.054	78	1.096
39	1.015	59	1.056	79	1.098
40	1.017	60	1.058	80	1.100
41	1.019	61	1.060	81	1.102
42	1.021	62	1.062	82	1.104
43	1.023	63	1.064	83	1.106
44	1.025	64	1.066	84	1.108
45	1.027	65	1.069	85	1.110
46	1.029	66	1.071	86	1.112
47	1.031	67	1.073	87	1.114
48	1.033	68	1.075	88	1.116
49	1.035	69	1.077	89	1.118
50	1.037	70	1.079	90	1.121
51	1.039	71	1.081	91	1.123

Enter with the mean temperature of the stratum of air traversed, and multiply the approximate height by the number opposite, for the true altitude.

When the thermometer has been boiled at the foot and at the summit of a mountain, nothing more is necessary than to deduct the number in the column of feet opposite the boiling point below from the same of the boiling point above: this gives an approximate height, to be multiplied by the number opposite the *mean* temperature of the air in Table 2 for the correct altitude.

Boiling point at summit of hill fort of Púrundhur, near feet.

Púna..... 204 2=4027

Boiling point at Hay Cottage, Púna..... 208 7=1690

Approximate height—2337

Temperature of the Air above..... 75°

Ditto.....ditto.....below..... 83

Mean=79=Multiplier.....1.098

Correct Altitude.....2.566 feet

When the boiling point at the upper station alone is observed, and for the lower the level of the sea, or the register of a distinct barometer is taken, then the barometric reading had better be converted into feet, by the usual method of subtracting its logarithm from 1.47712 (log. of 30 inches) and multiplying by 0006, as the differences in the column of "*barometer*" vary more rapidly than those in the "*feet*" column.

*Example.*—Boiling point at upper station. . . . . 185° = 14548 feet.

Barometer at Calcutta.

(at 32°) 29 in. 75°

Logar. diff. = 1.47712 — 1.47349 = 00363 × 0006 . . . . . 218

Approximate height. . . . . 14330

Temperature upper station, 76° }  
Ditto. . . . . lower. . . . . 84 } 80 = Multiplier . . . . . 1.100

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Correct altitude. . . . . 15763

Assuming 30.00 inches as the average height of the barometer at the level of the sea (which is however too much), the altitude of the upper station is at once obtained, by inspection of Table 1, correcting for temperature of the stratum of air traversed by Table 2.

(Newman, Optician, 122, Regent Street, has been in the habit of making these instruments; he recommends the use of copper brazed, instead of tin, as more durable; and a free escape for the steam, or the results will be incorrect from the boiling taking place under pressure; a model may be seen at the apartments of the Royal Geographical Society.—*ED.*)

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### VIII.—*Desultory notes and observations on various places in Guzerat.* By John Vaupell, Esq.

*Bassoo* or *Vahoo*. A large village or small town situated in a southeasterly direction from Kaira, in the Pitlaud pergunna, distant about six coss.\* It is said to contain nearly five thousand houses. Its inhabitants consist chiefly of Brahmins, Bunyas, Koonbees, &c. To the north-west of the town is situated the bazar, which has the appearance of being almost separated from it, by an intervening group of date trees;† but it is connected with the village by a range of dyer's houses on the east side. This part alone is said to contain upwards of one hundred dyer's dwellings.

\* A coss in Guzerat averages about a mile and a half English.

† *Elate silvestris*.

The bazar is called the *Poora*, the term usually applied to suburbs. It appears probable that, at one time, the town was surrounded by a wall, from the fact of there being two gates still remaining, one on the east, and the other on the north side of the town. A fine new *dharm-sala* placed in the south quarter, was built by the Potal for the reception of travellers of all descriptions. Adjoining the dharm-sala is a peer's tomb, built in the form of an oblong square, about the centre of which rises a large dome, over the grave of the holy personage to whom the structure is dedicated. Seven beeghas of land in the vicinity yield sufficient grain and pulse to feed three or four people, who perform the services prescribed by the Mahomedan religion at the grave of the defunct.

The circumjacent country is very fertile, and kept in a good state of cultivation. Numerous crops of wheat, just bursting into ear [January] present a pleasing and happy prospect of an abundant harvest to the husbandman. The cultivation at this season is principally carried on by irrigation, and forms what is termed the *khurruf* or dry crop, in contradistinction to the *rubbee*, or wet crop, produced by the periodical rains, and which is usually reaped in October and November.

Besides wheat and barley, the following vegetables are raised in abundance, brinjals, radishes, carrots, &c.; but tobacco and cotton take the lead among the objects of agricultural produce in this pergunna. Of the former, large quantities are cultivated, for there exists a great and constant demand both in the province, for home consumption, and at the seaports for exportation. It forms one of the principal sources of revenue. Cotton is likewise grown in abundance. The plant is allowed to remain in the ground for the space of three years, and is of the perennial kind called *nirmah* or *goreah*, producing the finest description of cotton in the province. If allowed to remain beyond the period above mentioned, the produce degenerates, so that it is found necessary to renew the plantation every three years. There are several varieties of this useful plant grown throughout the province: the first is the finest kind just treated of; next to which, of the annual varieties, the Broach, Surat, Ahmode and Jumbooseer districts yield the most abundant and finest descriptions, known more generally in the British market by the term *Surats*. Next to these in quality comes that of the Bhownuggur and Gogah districts, that of Kattiawar and Kutch, and, last of all, the Dollera and Jafferabad districts.

The annual kinds generally form part of the *rubbee* or monsoon crop, though the produce is not reaped till the *Khurruf* harvest: none

of these kinds, however, are irrigated. They grow mostly within a few miles of the sea, forming a belt, as it were, around the head of the Gulf of Cambay.

The introduction of the finer kinds of American cotton does not seem to have answered the expectations generally entertained on this side of India, though samples of the Bourbon and Sea island kinds have been very fine. The object in introducing the finer sorts of American cottons into India, seems to have been, to enable the East Indian merchants to compete with the Americans in the British market. This object will more likely be attained by endeavouring to improve the cottons of the country. The institution of various experiments directed to the best means of attaining this object, would in all probability lead to some satisfactory practical results. Greater attention to the mode of gathering and cleaning in the preparation; improvements in manuring and preparing the soil; observations as to the best season for sowing, and whether transplanting would have a beneficial or pernicious effect. What difference irrigation of the annuals would occasion, &c. what the nature and qualities of the soils in which the different varieties are reared, and what kind of soil would best suit the finer, and what the coarser sorts? In the course of conducting these experiments many other improvements would naturally suggest themselves, and the results when carefully observed should be recorded. The improvements might then be gradually introduced throughout the country, not by telling and urging the natives to adopt them, but by the force of demonstration, by having an experimental field or two in every cotton village or district, where the improvements suggested by experience might be acted on, and the cultivator be taught to improve the produce of his own fields.

*Dewah or Deva.* This is also an extensive village, situated in a south westerly direction from the former about two coss off, and contains about 1,500 houses. It is a substantial, well built place, the houses being generally two or three stories high and constructed of brick. The streets, as in most native towns and villages, are narrow and not laid out in any order. This place is remarkable for containing a large and handsome temple in its N. E. quarter. It is said to have been built by, and dedicated to, a Koonbee, named Bawah Ram, who in the decline of life became a Bhugut\*. A small garden surrounds two thirds of it, in which are planted a few champacas. Three young jacktrees, some limetrees, and several mangoes, compose

\* This term is applied to those persons, not of the Brahminical tribe, who separate themselves from all intercourse with the world, and dedicate the remainder of their days to the worship of God.

the whole variety. The most extraordinary circumstance connected with this temple is, that there is not a single Brahmin officiating priest in it; but those who perform the holy rites are men of the same cast as that of its founder, namely Koonbees; they have a few beeghas of land allotted to them for their support, and whatever surplus grain remains they distribute in alms to beggars. A lamp of ghee, is kept burning in the midst of the temple all the year round. •

*Kupperwunjee.* A large extensive walled town, situated about 22 coss N. E. from Kaira; it contains about 2,500 houses well built and much loftier than those usually seen in the large villages and towns in Guzerat. These are inhabited principally by bunyas, koonbees, coolies, and some mahomedans; a few Borahs have also taken up their abode in the town being attracted by the facility of procuring agate and onyx-stones, found in abundance in this neighbourhood, which they transport to Cambay in the crude state. This town is surrounded by a wall, whose foundation is stone and upper works brick; in some places it has partly fallen, in others, it is approaching with rapid strides to decay; a deep but narrow ditch encompasses the whole town. Innumerable remains of Mahomedan splendour,—tombs, eedgahs, mosques &c. indicate this to have been a flourishing spot during the Mogul sovereignty, and that at a period not very remote, they had possession of the place. Half a mile to the north of the town, runs a small stream with a rocky bed, named Moowar, which is said to contain hidden in its banks many valuable chalcedonies. The Borahs who live here employ people on purpose to dig them out. There is also at this place a glass manufactory, where small lamp glasses which are used in illuminations, are made.

The natives say that many years ago there existed a foundry for smelting iron ore, which would lead to the inference that this valuable mineral was to be found in the vicinity. In corroboration of this statement, they point to the numerous large heaps of slag accumulated outside of the town. These hillocks are composed principally of a kind of heavy vitreous substance, varying in size and weight from half an ounce to a pound and upwards. They are used at present for hardening floors, and, when pulverized, for manure.

Dubbers are also manufactured here of various sizes and shapes. These are well known to be much used by the natives for containing ghee, oil, &c. I shall describe the process of manufacturing these impure though useful articles.

In the first place the dubgars, or people who make the dubbers, form a flat *handee* or pot of common clay or earth, of the shape and size of the dubber they wish to make; while this is drying, they take the



fresh, raw hides of goats, cows, buffaloes, camels, &c. and having well scraped them, and deprived them of the hair, they chop them up upon a stone slab till the mass becomes of the consistence of butter. They then spread a layer of this mass upon the model of earth, which is by this time sufficiently dry, and fit for their purpose. After the first layer has dried a little, they repeat the operation, and continue so doing till they have formed the dubber of a proper thickness and consistence, care is taken that the mass is spread equally over the whole surface of the model: when sufficiently dried they harden the bottom by beating it with a wooden instrument resembling a schoolmaster's palmetto, or the broad end of an oar. They finish by making the neck of the vessel. The dubber is now exposed to the sun to dry, after which they beat out the clay model with a stick, which, being unbaked, breaks easily; this accomplished, the dubber is ready for use. They are made of all sizes and shapes from a capacity to contain three or four ounces, up to four and five maunds. It is to be remarked that old dry hides and old dubbars are likewise used in making new ones, and serve the purpose equally as well as raw hides, after having previously undergone the process of maceration.

*Journey to the Mahajun River.* At 7 A. M. we left Kupperwunje for the Mahajun River, which we reached after a slow march of four hours, though the estimated distance be only six coss, in a direction nearly north. At about half a coss from Kupperwunje, we forded a small rocky rivulet, named the Moowar. About a mile below the ford after uniting with another stream of its own size, it subsequently disembogues itself into the Saburmattee. Proceeding about half a coss further, we came to a small village consisting of 20 huts inhabited by coolies, a great number of whom were employed in irrigating their wheat and barley crops.

The name given to this village was Khanpore. A coss further brought us to a small village denominated "Kallabhy ka Mooara," containing about 50 houses, whose inhabitants are likewise coolies, and a coss further to another small stream, being the same above mentioned which joins the Moowar below Kupperwunje. The road from Kallabhy ka Mooara leads through a rising jungle of Pulus trees,\* the greater part of which were within a few days of flowering. The rich scarlet velvety blossoms of this ornament of the forests are called "Kesowree" by the natives, and are in much request in a dried state at the Hooly festival, when they are used by the Hindus to stain their clothes of a deep orange colour. The blossoms are gathered

\* *Butea frondosa.*

when full blown, and dried in the shade, in which state they are taken to market and exposed for sale. Two coss further brought us to Nirmaleh, a large village, consisting of about 500 houses; the road to this place was here and there studded with a few mangoe trees in full flower; at a coss and a half from hence, to the right of the road, is situated a Mussulman peer's tomb, almost totally screened from view by the numerous groves of mangoe and mowrah \* trees which flourish luxuriantly as well here, as in the northern districts of Guzerat. Half a coss more brought us to the village of Mandawah, belonging to a Mussulman. It contains from 300 to 400 houses, inhabited chiefly by Mahomedans. At the distance of half a coss hence, lies the Watruck, a beautifully situated and rocky river with very lofty banks, the northern of which we traced for nearly a coss through rather a gloomy jungle, when we found ourselves in the bed of the Mahajun. This river is a branch of the Watruck, after uniting with which a little below where we were, it ultimately joins the Saburmattee, previously however, forming a junction with the Seyree under the walls of Kaira. On the eastern bank of the Mahajun are the remains of a fort said to have been erected some 200 or 300 years ago by Sooltaun Mahmood Begrah, the then reigning King of Guzerat. Three bastions connected by a curtain or stone wall, two of which are entire, and the other partly fallen, are the only vestiges that have escaped the ravages of time; the centre bastion is built of stone to the height of about 50 feet. The one to the right, as you look towards the fort from the bed of the river, has a foundation of stone 10 feet high, upon which the bastion rises to the height of about 40 feet, built entirely of brick, and in the form of a large well, sufficiently capacious to contain an ample supply of water for the garrison, the channel of the river continuing dry for several months of the year. In the eastern wall, in a line immediately above each other, are placed four rooms, each about 6 feet broad by 10 long, connected by a winding flight of steps, which commencing at the uppermost room, in its descent runs through each room, and ends in a passage at the bottom of the well: there is a communication between the well and the river. From the traces of the fort which extend about half a mile inland, and a quarter of a mile along the bank, it appears to have been a place of some strength and importance. This is the river and the spot resorted to by the natives after the first and second fall of rain, to gather the valuable agates so much prized by the nations of the West. The stones are found in

\* *Bassia latifolia*.

the bed of the river, in round nodules, varying in size from that of a mangoe to a melon. Externally they have nothing remarkable to distinguish them from the other stones in the river, but on breaking a piece off the edge, they are easily recognized. The natives term them "Akeek" and "Khareeoh." The most beautiful and valuable are the Mocha stones, and moss, or bush marked agate. The Borahs are the only people who set any value on them; the native inhabitants of the vicinity making no distinction in this respect, between these agates and the common pebbles of the river. In the cool of the evening we returned to Kupperwunje, which we reached about 7 o'clock, after rather a fatiguing day's excursion.

*Nappa or Napaur.* A large village in nearly a north-westerly direction, and about ten coss distant, from Ometa. It contains about 800 houses which are inhabited principally by Bhats; there are likewise a few Brahmins, Grassias and Koonbees.

On the north side of the village is situated a handsome and ornamental tank. It is said to have been built about 450 or 500 years ago by a Patan named \* Taze Kan Narpalli, so called from a suburb in Delhi named Narpaul, wherein he was born. He constructed it during the time he was Sirsoobah of Pitlaud, deputed from Ahmedabad. The following is a description of the tank. A parapet wall four feet high surrounds the tank, which is built of brick, and is of an octangular form. Its circumference is about 500 yards, and in the middle of each side of the octagon is a flight of steps of a triangular shape leading to the water. The first remarkable object is an Eedgah on the western angle, built in the form of a parallelogram, having two doors, one in the southern wall, the other facing the tank; a flight of steps leads from this door to the water. Adjoining the Eedgah is a ghaut or sloping descent 15 or 20 feet in breadth, and paved with granite to the water's edge; there are two others of a similar description, one on the north, the other on the east side of the tank. Proceeding from this ghaut along the bank, level spaces, in some places broken, in others of chunam and brick work are traversed, from which it would appear that bungalows, terraces, and other buildings, had once existed hereabouts. At the termination of this, there is a small door or wicket to the right; entering which, after descending a few steps, you arrive at a quadrangular dome about 8 feet square. From this a noble causeway, thrown over 24 arches, stretches across to a solid piece of masonry, about 20 feet

\* He is frequently mentioned in the history of Guzerat, during the reign of Sooltan Mahmood Begrah and his successors.

square, placed in the centre of the tank. In the middle of this, there is a small dome erected upon four pillars of stone in which the remains of a few mutilated figures hewn out of coarse marble, lie scattered. Close to the dome stands a beautiful Jambool tree stated to be 150 years old; highly ornamental and affording a cool refreshing shade to those whose curiosity may lead them hither. The causeway is 86 yards long and  $1\frac{1}{2}$  broad, paved with stone. Two parapet walls of brick run along each side, the top of one of which is scooped into an open conduit or water channel, leading from the entrance door to the brick work in the centre of the tank.\* Upon each of the pillars above the level of the arches that support the causeway, are small semi-oval openings intended to give the water a free passage when the tank is full. On the N. E. angle in the wall are three circular inlets in a horizontal line, from the back of which, two walled trenches stretch in opposite directions to the extent of 100 or 150 yards, for the purpose of receiving the water in the rains from the surrounding country. On the wall immediately overhanging the tank, is a stone building intended probably to enable visitors to enjoy the sight of the water gushing into the tank through the three apertures above-mentioned. At the junction of the trenches a few yards from this building, are the remains of some trellis work, which, when entire must have had an exceedingly beautiful effect; being cut in stone, it must have cost immense labour.

To the east of the village, there is a large well or vaw, built by the personage above-mentioned. It had some time ago fallen in and the inhabitants were deprived of the use of it, when a rich Bunya, named Purbhoodass Shet, who came from Baroda to celebrate the marriage of one of his children, offered 500 Rupees to the villagers to get it repaired, but as they alleged that this sum was insufficient, he took the charge upon himself, and rebuilt it thoroughly.

*Gundar.* An ancient maritime city, regarding which there exists many and various accounts, as to its antiquity and former splendour. It is situated in an immense plain on the eastern shore of the Gulf of Cambay, about three coss distant from the sea, two coss (nearly due south) from the Dadur river, and about ten south west from Ahmode. Elevated mounds of brick and stone, as well as innumerable foundations, which have been excavated in the hope of finding treasure, as also for the material, are seen scattered over a space of about three miles in circumference. In the south quarter the present inhabitants have erected a few houses, built chiefly of the stones dug out of the ruins of the old town, by placing them one upon the other without uniting them by any kind of cement;

the major part of the inhabitants at present consists of fishermen who are at\* this season assiduously employed in manufacturing salt, which is exported in considerable quantities to the inland towns. A few Bhats, Koonbees and Borahs, make up the remainder of the population. On the north side of the present town, is situated a temple dedicated to Parsinath the principal deity of the Shrivuck Bunyas. Three marble busts, one black and two white are placed in a vault under ground.

In the Ayeen Akbery p. 66, Vol. II. 8vo Ed. mention is made of this place as one of the ports belonging to the great emporium of Broach, It was burnt † and sacked by the Portuguese under Don Manoel de Lima, in the vice-royaltyship of Don Joao de Castro 4th Viceroy of Portuguese India, in the middle of the 16th century. The modern town Jumbooseer is said to have been peopled by the inhabitants of Gundar who fled from this their native place.

*Ambowey Matah* also *Amba Bhowanee*. The name of a Hindu goddess to whom a temple is dedicated, and of whose miraculous powers many singular and fabulous traditions are related. This temple is situated about 84 coss to the northward of Ahmedabad, in a hilly country belonging to a Rajpoot Rajah, named Bapjee, who resides at Daunta, a town 12 coss to the southward of Ambowey. Three or four *jatras* are held annually in honour of this deity. They are numerous attended by Hindu pilgrims of all classes. The route from Ahmedabad to Ambowey is as follows.

Coss.	
To Kalee . . . . .	3
„ Addauleije . . . . .	4
„ Oomaseer . . . . .	3
„ Pettahpoor . . . . .	3—A town belonging to Rajah Futtch Sing.
„ Kookhurwarrah . . . . .	7
„ Vesnagar . . . . .	10*
„ Vurnuggur . . . . .	5
„ Kheraloo . . . . .	10
„ Sareswati River . . . . .	7—On the northern bank is the village of Rampoor.
„ Pepaloo . . . . .	10
„ Daunta . . . . .	10—Hills commence from this place.
„ Ambowey . . . . .	12

Total. 84 Coss.

\* March.

† “Passing further on, the city of Gundar hove in sight inhabited by Hindu merchants, enriched by commerce, but enfeebled by its citizens. It was first invested, taken, and destroyed. The natives delivered up their property at the price of their lives.” See Vida de D. Joao de Castro. p. 333.

The famous hill and temples of 'Aboo are not far from this place. The road from Daunta to Ambowey is said to lie through a thick jungly and hilly country, abounding in vegetation. Of Aboo, it is stated by a European visitor to have been bitterly cold (in January) and that ice was met with. The ascent to the great hill is very tedious, but when at top, the visitor is amply compensated by the view of the most beautiful temples in the country. The hedges on the road side were found to consist of the common dog-rose which grows wild all around, willows were met with, and the most beautiful jessamine, with a great variety of rare plants; wild oranges, though as sour as limes, were also in great abundance.

*Mewass and Giras.* We find the first mention of these terms in the history of the Mahomedan Kings of Guzerat by Ferishta. In the reign of Ahmed Shah, I. A. D. 1414, it is stated that "Mallik Tohsa in this year received a special commission to destroy all idolatrous temples, and to establish the Mahomedan authority throughout Guzerat, a duty which he executed with such diligence, that the names of Mawass and Giras were hereafter unheard of in the whole kingdom" (Vide Briggs' History of the Mahomedan power in India. Vol. 4 p. 18. ) To which the translator appends a note to the purport following. "The Mawassy and Girasy chiefs appear to have been much like the zemindars of Hindoostan, and the poligars of the south. They only acknowledged Mahomedan supremacy when it was enforced by the presence of troops, and they have till within the latest period, felt themselves bound in honour to withhold tribute till a body of soldiers appeared against them, even under the British Government." The term Mawas or Mewas, applies at the present day to those villages, in the northern and western parts of the province, in the hilly country about Vurnuggur, Veeshnuggur, Edurwarra, &c. and on the banks of the Mahee and Saburmattee rivers, in places difficult of access where the country is much broken up and intersected by ravines and jungle, which are inhabited by Coolees, Bheels, Rajpoots of desperate fortunes, and such like Hindus. These villages seem even during the height of Mahomedan prosperity and rule, to have preserved in some degree their independence, and at no time ever to have been completely subdued. The Hindu rajahs of Edur, Chitore, Dongurpoor, &c. appear to have been continual thorns in the sides of the Mahomedan rulers, and never to have been completely subdued.\* The term Mewasie is said properly to apply to all

\* The inhabitants of these villages being all Hindus bearing a deadly hatred to the destroyers of their temples and religion, kept up a constant communication with the disaffected Rajahs, and afforded them every aid in their power.

refractory villages, whether held by Coolies, Rajpoots, or Bheels; and, as the derivation of the word would seem to imply, not without reason. For as Mewassie villages are usually situated in hilly or broken ground, surrounded by deep ravines, and jungle, and of difficult access, their natural position would afford no extent of arable land to raise grain and the ordinary produce of the soil upon, for the subsistence of the villagers; but as they must live as well as their neighbours, and being of a predatory, roving disposition, they go about the country plundering and levying contributions from the more peaceably disposed merchant, husbandman, or manufacturer. The word Mewass, or more properly Mawas, as Firishta rightly spells it, seems to be a derivative from the verb '*Wassna*,' to inhabit, locate, found or people a village, the first and usual requisite to which is, to select a spot of good arable land in a level country with a ready supply of fresh water; a Mawassie village being the very reverse of all this, the negative term "ma" no or not, is a very apt prefix to the word, and defines the locality pretty correctly, which may be rendered, uncultivated wild, not *abad*. The term Mewass applies more particularly to the Coolee and Bheel, as that of Grassia does to the Rajpoot, but it is not to be met with beyond the confines of the province of which the Muhee river may be considered the southern boundary.

Girass, Girassia, or Grassia, is not so easily traceable, nor so capable of explanation as the former term. Though much has been written and said about the Grassias, there still exists a great deal of obscurity about their real origin, and the foundation of their rights to levy black mail from friend and foe throughout the country. From the silence of Abul Fazel on this subject, it has been supposed these claims were not in existence at the date of the Ayeen Akbery about A. D. 1600; but that they originated in the distracted state of the times and country which ensued after the death of the Emperor Akber, in A. D. 1605. That this however seems to have been an erroneous conclusion is proved from the fact of our finding mention made of the Mawass and Girass nearly 200 years before, in the reign of Ahmud Shah I, the founder of the city of Ahmedabad, and in such a manner that even then, they seem to have been notorious as a turbulent, refractory and rebellious set, who embraced every favorable opportunity of avenging the insults and cruelties they were continually experiencing at the hands of the destroyers of their temples and subverters of their religion, by annoying them by every means in their power.

The principal Grassias are, with very few exceptions, Rajpoots, and, as such, descendants of the ancient Hindu rulers of the country.

They formed likewise the military class or defenders of the country, for we have no ground for concluding that the Hindu princes prior to the Mahomedan invasion of India, were much if at all, distinguished by an ambition for foreign conquest. They seem to have been much more occupied with measures of defence and the protection of what they actually possessed, from the petty encroachments of each other, than remarkable for the renown of conquering foreign states. At the present day these exactions may be considered more as arising from actual want in some, and as a means of keeping up the remembrance of their rights in others; but wherever they do exist the mutual understanding also obtains of protection on the part of the Grassias to the contributors, from forays and inroads of others of their own class and of their own followers, or those over whom they exercise more immediate control. It is only when, what they consider to be their own hereditary right to share in the produce of the country, is unjustly withheld, that they proceed to extremities, and cause so much damage and distress to the country. This, in most cases, is seldom done without due warning to the contributing party, either by letter, verbal message, or posting up a paper in a conspicuous part of the village, stating the demands, and time and terms of compliance, or the nature of the consequences if the claims are resisted.

Sir John Malcolm in his account of central India states the term Grassia to be derived from Grass; a Sanscrit word signifying a mouthful, and which has been metaphorically applied to designate the small share of the produce of a country which these plunderers claim.\*

In corroboration of what has been advanced above, we find at the present day, throughout the western districts and the Peninsula of Guzerat, many Grassia chieftains and landholders, comfortably settled, and in quiet possession of land descended to them from their ancestors. These never think of going about the country to levy forced contributions, or in any way to connect themselves with those who do. The chiefs are all invariably Rajpoots and consequently of the military class; their dependants are made up of people of different tribes, the majority however being Hindús. Sir John Malcolm's enquiries led him to the conclusion, that they are chiefs who, driven from their possessions by invaders, have established claims to a share of the revenue, and maintain them upon the ground of their power to disturb or prevent its collection.†

Colonel Todd in his *Rajahsthan* (vol. 1st.) makes them to be landholders; his words are, "There are two classes of Rajpoot land-

\* Vide Central India.

† See Malcolm's Central India, Vol. 1.



holders in Mewar, though the one greatly exceeds the other in number. One is the Grassya Thacoor, or lord, the other the Bhoomia. The Grassya chieftain is he who holds (grass) by grant (putta) of the prince, for which he performs service with specified quotas at home and abroad, renewable at every lapse, when all the ceremonies of resumption, the fine of relief, and the investiture take place. The Bhoomia does not renew his grant, but holds on prescriptive possession. He succeeds without any fine, but pays a small annual quit rent, and can be called upon for local service in the district which he inhabits, for a certain period of time. He is the counterpart of the allodial proprietor of the European system, and the real zemindar of these principalities. Both have the same signification from 'bhoom' and 'zemin' land; the latter (term) is an exotic of Persian origin. 'Grassya—is from grās a 'substance,' literally and familiarly 'a mouthful.' Whether it may have a like origin with the celtic word 'gwas' said to mean a servant, and whence the word vassal is derived, I shall leave to etymologists to decide, who may trace the resemblance to the Grassya, the vassal chieftain of the Rajpoots. All the chartularies or puttas, commence:—'To \* \* \* \* grās has been ordained.' \*"

*Soonderyeenee Kharee*, or the beautiful creek is situated about 4 or 5 coss to the northward of Bhownuggur creek. It is said to contain a fine broad channel of various depth for about three coss inland, with a good muddy bottom, navigable for boats of from 300 to 500† candies burthen. The channel does not dry up like the Dollera creek, and is free from sand banks and other serious impediments to navigation; vessels of the largest description used in the coasting and Gulph trade, go up to the bunder in one tide. The bunder is situated about three coss from the mouth of the creek, the channel near it retains sufficient water to keep vessels (laden or otherwise) afloat at any time of the tide. In November and December 1822, a nautical survey of this and neighbouring creeks was made, by order of the Bombay Government by Lieutenant Dominicetti of the Company's Marine, who states that "Soondereyee creek is in Latitude 22° 0' 30". N. and bears from Bhownuggur creek N. 24 E. distant 8½ miles. It runs in a W. and N. W. direction for upwards of 12 miles from the sea, and is navigable about 6. Its breadth for the first three miles is 650 to 800 feet, for the next three about 370 feet; depth at high water spring tides, in the large reach 39 to 48 feet, and at low water from 6 to 15 feet; in the small reach from 30 to 32 feet at

\* Ibid.

† About 3 candies make a ton.

high, and dry at low water ; perpendicular rise 33 feet. High water, on full and change at the entrance at 4h. 28'. P. M. and  $5\frac{1}{2}$  miles up at 5h. 26'. The ebb runs  $6\frac{1}{2}$ , and the flood  $5\frac{1}{2}$  hours, the former  $3\frac{1}{2}$  the latter  $2\frac{1}{4}$  miles per hour..

“ Bhowleearee or Bannia Creek. Bears N. 48 E. from the entrance of Soonderyee creek, distant 2 miles. It is in Lat.  $22^{\circ} 1' 48''$  N. ; 8 miles in the length, and runs nearly N. W. and N. N. W. from 550 to 600 feet broad for 5 miles. At high water spring tides, depth from 26 to 35 feet, and at low water nearly dry, except at  $1\frac{1}{2}$  mile from the entrance, where three to five feet remain ; during the neaps, it never has less than 23 feet at high water, and is not dry for more than  $2\frac{1}{2}$  or 3 hours in twelve. Tides not so rapid as in Soonderyee. At the springs, the flood runs  $1\frac{3}{4}$  and ebb  $2\frac{1}{4}$  miles per hour ; high water full and change at the entrance at 4h. 32' ; and five miles up 5h. 36' P. M. bottom mostly mud, and mud and sand mixed.”

*Dollera Creek.* Lat.  $22^{\circ} 9' 10''$ . N. from the former, N. 18. W. distant about 8 miles. Till within these few years, Dollera was a place of little note ; its importance in a commercial point of view began with the extension of the cultivation of cotton to the westward, and the increase of demand for the European market. Formerly the cultivation of cotton was limited principally to the districts adjacent, and subject, to Bhownuggur, to which port, invited by the magnitude and safety of its creek, and the facilities of conducting commercial concerns, cottondealers chiefly resorted to purchase for the China market. The demand, however, of late years for the Europe market, being found much greater than the eastern districts could well meet, and the cultivators finding it likely to prove a greater source of profit than any other article, the produce of their soil, gradually extended the cultivation over a great portion of the country ; and, to improve the quality, introduced about the years 1811 or 1812, the fine, silky, long-stapled, podless cotton of the Jumbooseer and Ahmode districts, to the east of the gulf. The village or town is situated in an immense open tract, (part of the Runn)—on the western shore of the Gulf of Cambay, about 20 miles inland from the sea in a N. Wly. direction, having Cambay to the eastward, 20 coss, Bhownuggur S. W. 25. Dholka N. E. 20 coss, Limree N. 20 coss. It is within the jurisdiction of Kusba Dundooka, and may be said to contain from 5,000 to 6,000 inhabitants.

A considerable trade is carried on from this place to the several ports between Surat and Bombay, and with Bombay likewise. The chief imports consist of raw and refined sugar, iron, cocoanuts, cochineal, and raw-silk from Bombay ; jaggree ; from Surat, Gundavee,

and Bulsaur; rafters, bamboos, and timber from Dhanoo, Omergaum, and Bassein. These are again transported overland for the consumption of the inland towns to the northward; Dollera itself admitting of no demand for any of these goods beyond a few bamboos and rafters for the use of the inhabitants. The exports consist of wheat and cotton, the average annual quantity of this latter staple varies from 15,000 to 20,000 candies; the growth of the neighbouring districts of Jhalawar and Kattiawar. The customs levied at this port average from 60,000 to 90,000 rupees annually. Of late years, owing to the filling up of the creek, and the dangerous sand banks which have accumulated in the channel, the trade of the port has been removed to Bowleearee (a small village on the Bannia creek) and will in a few years in all probability cease altogether. Wheat grows in great abundance in the country about Dollera, and is of a very excellent quality: cotton, bajree, and jowarree, are cultivated in the rainy season. Salt-petre of a very promising quality is also obtainable in the neighbourhood; the Barilla plant abounds on the sea-coast; safflower is cultivated inland; buffaloe's horns, horn tips, raw-hides are also to be had. Great facilities for the manufacture of salt exist, and some made at Cambay is of a very superior quality. The salicornia (one or two species) and the salsola abound in maritime situations. The bitter purging salt,\* called bit-noben or bit-laban is likewise manufactured at Cambay from Myrobalans, alkali (Sajec Khar) and sea salt, and exported in quantities to Bombay and the southern ports.

It is generally allowed by those who are conversant in such matters that an equalization of duties on the produce of India imported into Great Britain with those of the West Indies and Mauritius, is, in the existing state of affairs indubitably necessary, and if such was the case under the old charter, how much more indispensable must such a measure *now be*, when the commercial branch is done away with, and that source of revenue cut off. The equalization of duties on our staple articles of cotton, indigo, sugar, salt-petre, &c. will not only benefit India by causing increased exportation and an extension of their cultivation, with improvement of produce, but it would likewise act as a spur to enterprising and public spirited individuals possessing a command of credit and capital to turn their attention to other sources of wealth and prosperity. Not to mention the mines of the precious and useful metals, and stones, with which its mountains and valleys assuredly abound, and many of which have hitherto remained

\* Sunchul, Gujerattee.

| A. D. 1835.

unexplored; let us take a glance at its maritime situations and see what promise they offer of rewarding labour, efficiently bestowed. Of the variety of aquatic plants, scattered on the shores of Guzerat and its peninsula Kattiawar by the bountiful hand of Providence, the salicornia and salsola form a part. Cattle do not eat these plants, though their taste is simply saltish. Dr. Roxburgh in speaking of the former plant says\* “these two species (the Brachiata and Indica) are very plentiful on the coast of Coromandel, where large quantities of the fossil alkali might no doubt be made at a low rate. Such manufactures deserve much encouragement, particularly here, where there are many more labouring people than can possibly find employment. Large quantities of this substance are annually imported into England from the Mediterranean for making soap, glass, &c. It is worth about twenty eight or thirty shillings per. cwt. and as labour is cheap on this coast the alkali might be made I think, at so low a rate as to admit of its being sent to England, and paying freight of £ 10 the ton or more, provided it could there be imported duty free;” in speaking of the other plant, the same author observes,† “this plant (salsola nudiflora) is very common in many places near the sea; the natives gather it for fuel only, the taste is strongly saline: no doubt it would yield good fossil alkali. How many valuable sources of wealth and happiness lie lost to the world over many parts of the Company’s territorial possessions in India, for want of encouragement, and enterprising men! The two species of salicornia already described, and this plant, might be made to yield barilla sufficient to make soap and glass for the whole world, at the same time such a work would give bread to thousands of poor starving labourers; which no doubt would greatly promote population and the consumption of the productions of these fertile countries; for, except during years of remarkable drought, there is always more grain produced than can be sold on the spot; I will not say than can be eaten, because few of the poorer classes can at the best of times procure a sufficiency of food during the dry season of the year, when there is little or no employment for them. It therefore appears the more necessary to institute such branches of manufacture as will employ those people during the dry season, such as gathering these plants and burning them for alkali, &c”. After describing what the impenetrable forests of India would yield if their products were converted into potash, Dr. Roxburgh concludes by saying, “but to effect such highly interesting objects the labours of an individual however inclined to promote the public good, can avail but little, when not powerfully and cordially assisted by Government.

\* Vide Flora. Ind. Vol. i. p. 85.    † Vide Flor. Ind. Vol. ii. pp. 60—61.

These remarks apply in an eminent degree to the shores of Western India, more especially of Guzerat and the Gulfs of Cambay and Kutch. The coasts of the former abound with the Barilla plant ; besides this valuable product, and the ordinary staples, cotton, safflower, and other products are extensively cultivated inland as specified above ; gums, wax, lac, glue, and drugs are all obtainable and form even now part of the imports into Bombay from the northern ports. But the first step to be taken is to ensure the delivery in Great Britain of these valuable products at such rate of duty, as will enable the importer to compete with the products of other foreign possessions, and that he may be enabled to bring them to the British market with as few charges on them, and at as low a cost as possible, making due allowance for moderate profits on the speculation.

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*Meeting.* February 7th Captain D. Ross, F. R. S. President, in the Chair.

*Members elected.* D. Clark, Esq., I. W. Winchester, Esq., Lieut. W. Christopher, I. N.

In consequence of the small number of members present, no other business was transacted ; and the meeting adjourned.





# PROCEEDINGS

OF THE

## BOMBAY GEOGRAPHICAL SOCIETY.

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MAY, 1839.

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### PAPERS, ETC.

- I. — *Journal of a visit to Sonmeanee, the Seaport of Lus, in Beloochistan, during an attempt to reach Kelat from Kurachee in the disguise of an Usbec in May 1839. By Captain W. C. Harris, of the Bombay Engineers.*

Having been apprized of the wishes of Government, that an early opportunity should be embraced of examining the line of road betwixt Sonmeanee and Candahar, with the design of testing the accuracy of certain native information which I had previously submitted respecting that route, and of ascertaining what facilities it affords to the progress of an army, I resolved, although the season was far advanced, to take advantage of a favorable opportunity which presented itself during the month of May last. A large caravan of Affghan cloth merchants were on the point of setting out for Candahar from Kurachee, and the offer of gold readily induced their leader, a native of Kelat, named Rusheed Khan, to undertake the conducting me to the latter city; and to promise upon the faith of a true believer, that for the sum of three hundred Rupees he would proceed with me in advance of the Cafila upon an Hurkaruh camel, so as to reach Kelat in eleven or twelve days; and that he would return with me thence to the British camp at Kurachee, whenever I should have completed my observations.

The presence of Sir John Keane's army in Affghanistan, and the avowed hostility of the predatory tribes of Belooches inhabiting the countries to be traversed, rendering it imprudent for a European to attempt the journey otherwise than in disguise, I determined to adopt the costume of a Pathan, with the style and title of Khan, trusting to a beard of some months cultivation, and to a shaven crown, together with a knowledge of oriental manners and the Persian lan-



guage, to enable me to support the character which I had assumed of a "fair haired son of the Usbecs," which would be the less difficult since the complexions of many members of the *Cafila* were fully as fair as my own. As however, much more would depend upon the good faith of my guide, and it was obviously to my interest by meeting his views in every way to preserve a good understanding, and evince my perfect confidence in his integrity, (which, be it known, a variety of circumstances were gradually giving me reason to regard in a very questionable light,) I hesitated not, at his earnest request, to advance a considerable portion of the stipulated reward, in order to enable him to complete the purchase of camels required for the carriage of his merchandise, the recent great demand for those animals having prevented his hiring any, as he had heretofore been in the habit of doing. "He is a bad paymaster that will pay in advance," but it was nevertheless requisite to do so on this occasion, or travel on bad terms with a man, to whose keeping I was about to confide my personal safety.

By the advice of Rusheed Khan, I provided myself with a stout yaboo properly caparisoned with native trappings, and also a riding camel of his own selection; hiring a second to carry bedding, saddle bags, and my servant, a Syyud who generously insisted upon accompanying me in the guise of a fakir. Rusheed Khan was to supply our daily wants on the road, but to provide against accidents, I carried a small bag of biscuit and some tea, together with a weather worn rowtee, and a sum of ready money, which latter was disposed about my own waist, and that of my domestic, a bill of exchange and letter of credit on Kelat, being bound about my arm in the fashion of an amulet. The fear of attracting observation induced me to carry no other instruments than a small pocket compass and a thermometer; and my scanty notes were to be kept in English, entered in the Persian character upon the pages of a native merchant's ledger, lent me, together with two bales of cloth, by the Khan; but I determined to write as little as possible, and never on any account to use a pen in the presence of strangers.

*24th. May.* My intended departure having with no small difficulty and many precautions been kept a profound secret from every one excepting the Brigadier Commanding the Reserve Force, to whom I was indebted for permission to undertake the journey, and the few friends whose kind offices were indispensable, I left the British camp at Kurachee shortly after night-fall on the 24th May, and being properly metamorphosed, repaired to a spot near the town which had previously been agreed upon as the point of rendezvous with Ru-

sheed Khan. My costume consisted of an under shirt of white linen, with long flowing sleeves; a flowered woollen tunic; spacious cotton trowsers, wider than any Dutchman's; a quilted skull cap, encircled by an ample turban, and a shawl pattern loongee around my waist. A broad leathern shoulder belt supported a trusty Damascus blade: a brace of pistols decorated my girdle, and at my back rattled a round shield of Rhinoceros hide, with huge brazen studs. After many hours passed in this far from elastic gear, I was at length joined by the merchant, and by his cousin, Ameen Khan; and after some lame apologies offered on their part for the delay, we commenced our journey, the former riding my palfrey, and the latter guiding the trotting dromedary which had the honor of bearing my Pathanship upon the crupper. The moon, wanting only four days of the full, set about 3 o'clock, but the night was still beautifully clear, and we jogged merrily on, enlivened and kept awake by bursts of melody from the throat of the Khan, until, having advanced eighteen miles at a foot pace, we overtook the Cafile shortly after sunrise, at the Hubb river, the first stage on the road to Sonmeanee.

Leaving the hot springs at Peer Hadjee Moonga's Tukia\* about four miles to the eastward, the road we travelled this night was nearly due north. After crossing the second arm of the Lyaroo two artificial tanks occur, at the distance of one, and four miles. Owing to the showers that fell in March, they both contain water which it is possible to drink, and after a good season would doubtless afford an ample supply. The first twelve miles of the road are good, though occasionally ploughed into deep ruts by former rain; and the general aspect of the country is bare and level, with an incrustation of clay, and numerous clumps of that eternal Noorun

\* Amongst the few *lions* of which the neighbourhood of Kurrachee can boast, the chalybeate hot springs and tame alligators at the Tukia of Peer Hadjee Moonga, are undoubtedly the most curious. The springs, five or six in number, are situated about eight miles North from the town, in a sequestered grove of cocoanut and brab trees, encircled by barren stony ridges. Their temperature varies considerably. In the hottest the thermometer stands at 120°, and the finger cannot be immersed more than a few seconds with impunity; but others are only tepid. A shallow tank formed by the water flowing off, is literally teeming with alligators. I have counted upwards of eighty of the scaly monsters in the space of as many square yards; and they are sufficiently tame to quit their retreat at the bidding of a stranger, and take their places around his breakfast table; an occasional gentle hint being, I confess, requisite to remind the guests of what is due to good breeding. An *ooruz* is annually held at the Tukia, and the springs are much resorted to by invalids. The mausoleum of Hyder Boola Khan, and other elaborately carved tombs of red free stone, within sight of the tank, are well deserving of notice.

bush—yellow, parched, and sickly, which in Scinde, constitutes the principal feature in the vegetable kingdom. Advancing towards the mountain range, called Hala or Brahooick, the ground becomes gradually more and more broken, and the stony road traverses a succession of barren valleys, divided by low ridges, of which the most remarkable feature is that they are all wedge-shaped, and ribbed, either vertically or horizontally. The last of these valleys, which measures a mile and a half across, was covered with breeding mares, herds of buffaloes, and flocks of the Doombah sheep; but I failed after the closest scrutiny, in discovering a single blade of grass for their entertainment. The plain terminates with the Hubb river, a shallow sandy bed from two to three hundred yards in breadth, with extensive pools of clear water, surrounded by shingle and coarse rushes. Both banks, as well as several islets in the channel, are clothed with a wilderness of the tamarisk tree, which here attains a most luxuriant growth. Many measure fifty feet from the top-most branches—the airy and graceful foliage being rendered more particularly agreeable to the eye, from the total absence of every other green object to which it has been accustomed in more favored regions. Both by Belooche and Scindian, the Hubb is considered a neutral stream, and the only wood obtainable for many miles is found on its banks. Rising in the Hala mountains, it disembogues into the sea, south of Ras Mooaree or Cape Monze, after a very limited course, the occasional violence of which is nevertheless attested by the denuded roots of the trees nearest the brink.

*25th May.* Having turned night into day by preserving this weary vigil, I felt no small inclination to pursue the reverse order of things, by following the example of the true believers, who were snoring around me. But, as well from the persecutions of cattle ticks and blue bottle flies, as from the overwhelming heat, sleep of any continuance was to me perfectly out of the question. A fiery blast, such as curls from the mouth of a furnace, blew during the greater part of the day, accompanied by clouds of searching impalpable sand; and even in the shade of a spreading tamarisk tree, the thermometer indicated 117°. As a midday repast, a little coarse rice rendered perfectly intolerable to a European palate by the lavish admixture of the most offensively rancid ghee, (misnamed “clarified butter,”) was set before me by mine host, with the never to be redeemed promise of an improvement in the *cuisine*, which he proposed should follow the destruction of a tough old ram, obtained by virtue of eight annas from one of the numerous goat-herds on the river, and then dangling at the shambles.

**26th May.** The caravan resumed its march about one o'clock on the morning of the 26th, and having passed through a Lukh or defile in the Hala mountains, halted before sunrise at a well of excrable water called Bhowanee, eight miles distant. After getting clear of the Hubb river, the road, which for five miles was extremely good, lay north-west through a thicker jungle than is usually to be met with in these regions, except in the Shikar-gahs of Scinde. It consists of noorun (or prickly cactus) and caper bushes, interspersed with stunted baubel, waxing thinner towards the foot of the range shortly before reaching which, the lashing of the waves became audible. Our passage by moonlight through the defile of Jhallawan into Beloochistan was extremely stirring. Fast sinking in the west behind the wild and picturesque mountains which rose before us in dim perspective, the moon was just sufficiently high as we wound through the pass, to throw a pale and cloistered light over the craggy masses of white rock that flanked the right of the road; whilst they cast into gloomy and impenetrable shadow the bluff group abutting on the left, the bold dark outlines of which were contrasted with a clear and spangled sky. To heighten the effect, the sharp voices of the camel drivers, urging their starved and weary beasts over the pointed stones, echoed from rock to glen—varied by the funereal notes of the hyæna, the sole occupant of these dark recesses, and by the stifled murmuring of the ocean, which broke at intervals upon the ear. This defile does not exceed a mile and three quarters in length, and having no perceptible difference of level, might without much difficulty, be rendered practicable for artillery, the road throughout being broad and level, though occasionally broken and strewn with loose stones. Towards Ras Mooaree, the height of the chain, which at the pass of Jhallawan may be estimated at 1500 feet, gradually decreases; but it rises rapidly in the opposite direction, as it stretches away to the north-east to complete the barrier betwixt Scinde and Beloochistan.

The resting place at Bhowanee is marked only by a deep well of intolerable water, dug in a ravine, the sunken bed of which is overgrown with wild broom. It is situated about a mile beyond the pass, in a valley formed with the great range by a spur which branches from it so as effectually to exclude the sea breeze. Not a tree of any sort extends its friendly shelter to the scorched wayfarer; a thick jungle of cabbage-shaped noorun bushes serving to increase the heat by obstructing the circulation of air. In the shade of a bale of merchandise under which I passed the day, the thermometer stood at 119°; and to the horrors of such a Pandemonium were superadded the total

absence of occupation, palatable food, and water. A number of Hindoo families travelling from Sonmeanee to Kurachee—the women and children on donkies and in *tukht-i-ruwans*, halted here during the day; and our party was further augmented by near one hundred gosaens from Benares, whom we had passed at their bivouac the preceding night, strewed about on either side of the road like the slain on a battle-field. Of these wayworn pilgrims, who were journeying to Hinglaj, I made many enquiries regarding that far-famed temple in Mukran. They represent it to be dedicated to Kalee, and constructed on a remarkable fountain, which rises at so great an elevation as to overlook the sea, although very distant from it. It is famous from the circumstance of its having been visited by Rama, who on his way thither sojourned one night at Kurachee: a tradition which claims for that town the appellation Rambaug. Hinglaj, or Nancee as it is usually called, is four days journey westward from Sonmeanee and being greatly resorted to, the passage of pilgrims through the latter place, from all parts of India, forms a great source of revenue to the Government of Lus; each individual being required to pay black mail to the Hakim or Governor of Sonmeanee, in the amount of three rupees, or more, for a safe passage through the country—an exaction of which the pious mendicants do not fail to complain lustily, and to acquit themselves with the worst possible grace.

During the intense heat of the day, every individual of the party assembled at Bhowanee, either actually was asleep, or like myself, pretended to be so; and, the number of drowsy souls amounting to at least two hundred and fifty, it may be supposed that the snoring was by no means inconsiderable. As the sun declined and the evening drew on, however, the scene became one of extraordinary cheerfulness and activity. Whilst the good merchants, indolently seated on their carpets, stroked their long beards, told their beads, and mumbled verses from the Koran, their servants were engaged in operations culinary, in driving up the camels from forage, and in making all necessary preparations for the approaching departure. Wild choruses burst from various quarters of the bivouac, the clear mellow voice of old Noor Mahommed—a toothless, but blithesome member of our caravan—occasionally drowning every other, as he anathematised the despised pilgrims who were attuning their humbler throats to the music of the gourd. Even the phlegmatic souls of two corpulent Bannians belonging to Sonmeanee, who had joined us the preceding evening, were moved unto music. They were suddenly seized with an irresistible desire to contribute to the general melody, and their husky efforts did not fail to draw upon them the contumely

of every true believer who held the Hindoo population in becoming contempt. It is worthy of notation that whilst on the march, Ameen Khan, who usually drove my camel, made it his constant study to annoy the Uteets by every means in his power. Their oft repeated chorus of "Bo'aya, Matajee, nê," never failed to induce a charge if Ameen Khan was within hearing; and having forced some ochre-colored mendicant off the road he would, exclaim with a loud and savage laugh, "Have a care sirs, I beseech you! There is another lame rascal rolling in the dust, gourd and all! You fools will tie your loins so tight about with ropes, that you cannot wag your legs!" "Every one of these fellows" he would add, turning round to me, "carries a little river at his back. By the beard of the Prophet, if they continue to tumble about in this clumsy manner, we shall stand a fair chance of being drowned!"

*27th May.* A very long and tiresome march, from eleven on the evening of the 26th until day light, led over a broken and difficult road, which wound for fifteen miles along the narrow banks of deep ravines and water-gullies. A heavy dew fell during the night, and wetted every one to the skin, but the atmosphere was exceedingly close and unpleasant. As the day broke the caravan reached the deep dry channel of the river Biddoke, leading by three principal branches directly to the sea, through a precipitous sand cliff. The dashing of breakers, which had not been heard since leaving the defile of Jhallawan, again became audible; and in a few moments more, the dark ocean was visible, stretching away at our feet. Advancing, the cafila literally seemed to have become entangled in a chaotic labyrinth. The path, a very sloping and perilous one, skirted the left bank of the nearest arm, and was rendered so slippery by drifted sand, that the drivers were fain to plant themselves upon the brink of the precipice in order to prevent their camels from approaching too near, and being dashed to pieces. As the heavily laden animals laboured along the steep declivity below, sinking to their knees at every step, I paused on the summit of the cliff until the gray light of morning should disclose the whole of the landscape, which, from so great an elevation, proved, as I had anticipated, to be one of singular magnificence. Far below, the blue sea rolled up its white surf to meet the long green lines of tamarisk which marked the serpentine course of the three mouths of the Biddoke, winding (after they had emerged from the sand cliff) across a flat of more than a mile and a half in breadth. The black and misty hills of Ras Mooaree, rising out of the ocean, stretched away

into the broad expanse on the left, and on the right the perpendicular bank vanished into the perspective of distance. Nor was the prospect from below less remarkable. Beetling cliffs, time worn and honey-combed, upreared their venerable buttresses without the slightest slope, to the height of from three to four hundred feet—riven to their very bases as if by some giant hand, to afford a passage to the waters of the Biddoke, which during a flood must roll out like the torrent from an unbarred sluice gate. After descending to the level of the sea through one of the three mouths of this singular river, curiosity prompted me to enter and follow up the now dry channel of the principal arm, until I was arrested by an abrupt rise, which in the rains must form a cataract of not less than one hundred and fifty feet fall. The tortuous bed did not in any part exceed fifty feet in width, whilst the banks, rising like sculptured walls on either side, measured at least three hundred in height.—Their strictly perpendicular character reminds the spectator of the shaft of a mine, the lower portions being scooped by the action of the water into the most fantastic forms that can be conceived.

The Hala mountains were now concealed from view, and the road led parallel to the coast, over a sandy flat, which, judging from the honey-combed appearance of the cliffs which bound it, must at no very remote period have been covered by the sea; although now, even at the springs, the tide does not rise within a mile of them. As the flat encreases in breadth, these cliffs gradually diminish in height; and on their face, at intervals, traces exist of numerous small cascades, which in their fall have scooped out considerable basins below. One of these contained excellent water, and ought to have been made the halting place; but having been compelled to dismount in order to escape the annoyance given me by reiterated punches from the drowsy Khan's brass studded shield, which dangled at his back, that worthy had most unceremoniously urged on my dromedary, and betaken himself to sleep at a pool of excessively brackish water four miles in advance; whither, despite the curses and imprecations of the Belooches and camel drivers, we were forced to follow. Bad as it was, this well was much frequented during the day by milch cows, goats, and buffaloes, which in the evening were driven up the cliffs by sundry paths leading to the dwellings of their wild herdsman. Each of these surly ruffians was armed to the teeth with a sword, shield, and lighted matchlock; nor would the temptation of money induce them to concede me the luxury of a little milk. I may here

remark, that the buffalo of Beloochistan is strikingly unlike that of India; being small and compact, with short robust horns, strongly inflected inwards like those of the wild species found at the Cape.

Since leaving Kurachee, my unhappy yaboo had tasted neither grass nor grain—the hopelessly barren country not producing the one, and the Khan, in his stinginess, having failed of his promise to provide the other. Abstinence, added to the bad water that he had drunk, had produced a violent dysentery, by which the poor beast's ribs were fast being developed;—and the awkward khogeer, or native saddle, which was perched like a howdah on the pinnacle of his back, having with the assistance of bad equitation, pinched and galled his withers in the most deplorable manner, I resolved to leave him with one of the Hindoos of Sonmeanee, to be sent back to Kurachee whenever an opportunity might offer. But if the steed had fared thus badly, the master was in scarcely less pitiful plight. Rusheed Khan, whose idol was gold, continued to set before me, the victim of his parsimony, such rank and greasy messes, that my stomach turned at the very sight of them; and I had literally tasted nothing since leaving the British camp at Kurachee, but a little tea and some dry biscuit, disposed of in secret to avoid the appearance of singularity.

*28th May.* Although the rowtee was struck, and every preparation made shortly after sunset, the caravan did not resume its march until two on the morning of the 28th, it being impossible to find every one awoken at the same time. This was the night of the full moon; and the road continued across the gradually widening flat to which we descended yesterday. The soil affords indications of being thickly covered with grass during ordinary seasons, and this tract is said to be the principal breeding ground for camels; but from the total failure of rain during the last three years, (or even five) it is now perfectly denuded of vegetation. With the Booreeda river—a broad sandy bed which is crossed about three miles from yesterday's bivouac—the sand cliffs cease, and are succeeded by a ridge of low stony hills, sprinkled with Noorun bushes, which extend nearly to Sonmeanee—the Hala mountains again appearing though indistinctly. The sun waxing excessively hot after we had proceeded ten miles, it was considered necessary to halt until evening at a well of dirty water in the open plain, where not the smallest shelter existed; and in this delightful spot, the mercury again stood at 117° in the shade of my cloth bales. Resuming the journey about 3 P. M., we passed over undulating hillocks of drifted sand, variegated with detached clumps of stunted tamarisk, on which a



few small mares were industriously browsing, there being in the whole landscape no other approximation to verdure. A salute of nine guns fired in honor of the arrival of two boats from Bombay, presently announced the proximity of Sonmeanee; and ascending a belt of sand hillocks, the sea-port of Lus presented itself to the gaze, standing in a hollow at the head of a nobly extensive bay, in all its glory of "dab and wattle." Melancholy and desolate indeed is the picture which the surrounding tract presents; a wide waste of white sand drifted into a wave-like succession of mounds, enlivened by no green thing, but strewed with the bleaching bones of camels and other animals that have died from starvation. The town which is situated on the eastern bank of the Pooralee River, is about one third the size of Kurachee, built entirely on the magpie-nest plan of sticks and mud, with *bad-giris* or ventilators; but nearly half the houses are tenantless, the cholera having lately swept off upwards of five hundred of the inhabitants, whilst others are daily dying of positive starvation.

Although the actual distance of Sonmeanee from Kurachee does not exceed forty-five miles, yet from the winding character of the road, the number of miles to be passed over falls little short of sixty. The population is Belooche, under a Hakim appointed by the Jam of Lus, and there are besides a few Bannians in the bazaar who carry on a considerable commerce both with Bombay and the coast of Arabia. The principal Hindoo is the celebrated Taroo, mentioned by my friend the Affghan horse dealer, as uniting to the wealth of Croesus, the most rigidly penurious habits. The costume of the Belooches of both sexes corresponds with that of the Scindians, and the Hindoos are distinguished by the same preposterous turbans as their brethren at Kurachee. The town has no wall or other defence excepting two small pieces of ordnance mounted on a mud tower to seaward. These constitute the saluting battery, and during my brief sojourn, the firing was without end; every little craft that entered or sailed out of the harbour being honored with ten or a dozen discharges, for which I conclude her owners were made to pay handsomely.

Thus far, I had found no difficulty whatever in passing myself off to the entire satisfaction of every one, as a faithful follower of the Prophet. In order to give an air of greater truth to my avowed character, I daily performed the prescribed number of prostrations and genuflections, mumbling my orisons in public with becoming ostentation; nor indeed had I been suspected by any one, except by a forward Mukranee camel-driver, who, having been hired at

Kurachee, had formed a shrewd guess that I was not exactly what I pretended to be, and had resolved to turn the suspicion to his private advantage. This troublesome savage, the very personification of impudence and villany, had been most inquisitively vigilant throughout the journey, and had early commenced his persecutions by dunning me incessantly for the sum of four annas, to which he laid claim for having fetched water from a neighbouring pool for my use! To have met this exorbitant demand would have been to proclaim myself at once a man in affluent circumstances, and to have paved the way to further extortions; and I have reason to think that my dogged refusal induced Jafferah to publish his well founded suspicions, and thus put the authorities of Sonmeanee upon the *qui vive*. Whether or no, his roguish eye was always upon me; nor was he less a thorn in my side than in that of Rusheed Khan. 'Arcades ambo,' these two worthies hated each other like poison, and never failed to pass many hours of each day in the interchange of the most unmeasured personalities; the untiring tongue of the Mukraanee always however, gaining for him the last word, and by virtue thereof, the victory.

Presently after my arrival at Sonmeanee, numbers of Affghan horse dealers, and cloth venders, who had come by boat from Boonbay, crowded up from the landing place, and the greeting and salutations became universal. Having myself fewer acquaintances than almost any man present, I fell somewhat in the minority; but so long as there is a beard to coax, a mustachio to curl, or any part of the body to be scratched, he who personates a native need be at no loss how to employ his hands! I was a little puzzled also at meeting in this place several Pathan Merchants, whom I had known in the camp bazaar at Kurachee; and who, having heard of the restoration of Shah Shoojah ool Moolk, were hurrying to Candahar with their wares. To one of these, I immediately made myself known, receiving his promise of assistance and secrecy. He informed me that cossids had just arrived, bringing letters from Candahar and Kelat, which contained ill tidings; and he afterwards showed me one addressed to himself in Persian, by a friend residing in Kelat, stating that fifty thousand Douranee horse, led by the eldest son of Dost Mahommed, had opposed a division of the British army on its march to Cabool, and had defeated it with signal slaughter, making Sir Alexander Burnes prisoner, and capturing the whole of the Artillery. It was added that although the Shah was seated on the throne, the Khan of Kelat had not gone forth to do him homage, but (like the bat in the fable) was watching the turn that events would take. In

the course of the evening, I perused two other Persian letters to the same effect, both of which stated the British division to have consisted of 12000 men, and the loss to have exceeded 7000. One was from Candahar without date; the other from Kelat, dated 29th of Suffer, corresponding with the 14th May, and addressed to Rusheed Khan. Nothing could have been more inimical to my plans than the receipt of this news, which, although evidently 'a weak invention of the enemy' was nevertheless implicitly believed by all who heard it; and would have the effect of inflaming the arrogance of every inhabitant of Beloochistan, who, inclusive of the people of Sontmeanee, would of course take their cue from Mehrab Khan of Kelat. As for the Affghans, it had an instantaneous effect, and afforded them subject of conversation during the greater part of the night. "How could those asses of Feringees, the sons of burnt fathers, have supposed it possible to escape from the sharp swords of the Douranee Cavalry," said old Noor Mohammed, exhibiting his toothless gums. "Is not Dost Mahommed Khan bolder than a hungry lion, and do not his followers exceed the sand grains on the sea shore in multitude?" "For our own part" exclaimed twenty voices, "we are not sorry to see the Shah again upon the throne of Cabool, but may the Almighty confound the meddlers who have placed him there. The Affghans require none of their interference." In these complimentary expressions I of course heartily concurred, and great was the dirt eaten at my hands by my countrymen on that memorable evening. But Rusheed Khan, apprehensive of discovery and its consequences, now repented him of his bargain; and although he had not the honesty to say so like a man, immediately changed his manner towards me, and became obviously anxious from that moment to wash his hands of me upon any terms, that would not involve the restitution of the advances he had received.

Amongst the other arrivals from Bombay, was an insane Syyud, whom I immediately recognised as a buffoon, that I had seen some years before in the service of the Nawab of Cambay; and who had now turned Fakir, and become ten times more mad than ever. Fixing upon me his deep sunken filmy eye, which told the tale of his malady, he made various enquiries as to when and where we had met before—prosecuting the investigation most rigorously, until a sudden paroxysm fortunately relieved me of his irksome society. Springing on his feet, and stripping himself to the waist, he girded up his loins, trampled under foot his green habiliments, and raved to and fro exclaiming Zinhar! Zinhar! Zinhar! \* flour-

\* Take care, take care, take care!

ishing the while a huge two edged faulchion, and dexterously screening himself from the cuts and points of some phantom foe behind a circular black buckler, picked out with yellow lions and Roostums. My attendant with some of the people were meanwhile engaged in pitching the rowtee, and the excessive hardness of the soil beneath the sand, turning the points of the pegs before they had made any impression, the maniac suddenly cast away his weapons, grasped the mallet, and exclaiming "Is this the sum total of your strength, ye babies!" dealt about him so lustily, that a dozen pegs flew to shivers in as many seconds.

The rowtee was pitched on an undulating sea of burning white sand, half a mile from the town, within sight of no bush, nor shrub, nor shade; and ill can I convey an adequate idea of the misery I endured under its tattered canopy during the whole of the following day. With a design I conclude of disgusting me, Rusheed Khan had constituted it the rendezvous for every gossip and vagabond in the place; taking care moreover that the conversation should be conducted in the Pushtoo instead of in the Persian language, so as effectually to exclude me from any share therein. In order to avoid appearing singular, I was therefore compelled to feign asleep during the greater part of the oppressively hot day, and right slowly and wearily did the leaden moments crawl on. Kadur Khan, Rusheed's valet, took up his position at the head of my carpet, and having completed his toilet by industriously combing a host of vermin from his shaggy Affghan locks, did me the favor to share my pillow. Night came at last, and then, to complete my discomfort, Ameen Khan chose to be seized with fever; and feigning himself at the point of death, the chicken hearted fellow wheezed and groaned incessantly in my ear, exclaiming "Oh Kadur, be quick! bring a physician; the fire is consuming my vitals, and I am a dying man." To escape from this annoyance I moved my carpet outside; but no sooner had I done so, than the rain, which for full five years had never once visited Sonmeanee, descended in torrents, forthwith converting the tent into the asylum of ragamuffins of every degree, who packed themselves away as compactly as possible, and maintained a brisk conversation during the whole of the night.

Early the following morning, I was not a little perplexed at hearing a voice outside enquire in Persian "Where is that accursed Feringhee concealed, whom you have brought from Kurachee?" and immediately afterwards the Hakim of Sonmeanee accompanied by two grey bearded Beloochees, took up a position opposite

to the door, and telling their beads, appeared disposed to wait with the patience of true believers, until it should be the good pleasure of the infidel to awake.—At the expiration of an hour however, their stock of that ingredient being completely exhausted, they entered the tent, and unceremoniously seated themselves beside my carpet; when a long dialoguë ensued between us in the form of an insolent catechism put to myself, which terminated in their retiring tolerably well satisfied with my account of myself, and fully convinced that I was a *bona fide* Moosulman. Shortly afterwards however, my friend the Kurachee merchant came to inform me, that in consequence of some communication made to the Hakim by Jaffrah, a messenger had been despatched to Beilow to acquaint the Jam of the arrival of a spy; adding that he could strongly advise my either resuming my journey towards Kelat without a moments delay, or returning at once to Kurachee; and I presently found myself so closely watched by Belooches, that I saw the necessity of attending to Yoosuf Khan's advice.

Upon claiming from Rusheed Khan the performance of his promise to proceed with me straightway to Kelat, that worthy, as I had feared, did but throw obstacles in the way. He urged the inability of my riding camel to perform the journey, although he had himself purchased it for me at a great price. He exaggerated the danger to be apprehended both at Beilow, and from the Beloochee tribes of Mengul and Bezinjow—occupying the country about Nal and Wudd—to which he had never before alluded;—and after declaring the impossibility of preceding the Cafila under any circumstances, finally expressed his unalterable determination of remaining where he was until carriage should be obtained for his goods from Beilow, which could not fail to occupy at least a week. I had already detected the Khan in the substitution of a sword of inferior value, for the expensive blade I had purchased of him at Kurachee; and at this new display of the cloven foot, the blood boiled within me. Yet being completely in the villain's power, I had no alternative but to adopt a tone of mild remonstrance. I represented that the arrangement he proposed, so different from his original agreement, would not only involve prolonged starvation, loss of rest, and exposure to the most intense heat, but would also deprive me of the means of making observations on the road, which I had accomplished thus far, by the aid of the moon alone;—adding that in the existing position of Mehrab Khan, it was neither probable that I should be permitted by his vassals to reach Kelat, if the intelligence of my advent

were suffered to precede me; nor that, if recognized as a *Furung*, I should be able to elicit the information I desired. The honest Pathan, however, continuing to turn a deaf ear to my arguments, I had no alternative but to retrace my steps immediately—mentally resolving to renew the attempt in more favorable weather,—to travel with a single attendant,—and as far as possible to avoid visiting towns or villages during the day. Anxious to avoid a repetition of my late tedious march by stages, and deeming it prudent to tarry as little on the road as possible, I left the Syyud at his own desire, to be escorted by Rusheed Khan, (a promise which the latter never redeemed,) and hired a trotting dromedary in the town, the proprietor of which, (an ill-favored Beloochee in the service of the Jam,) promised to set me down at Kurachee before day break, the next morning.

During my very disagreeable stay at Sonmeanee, I lost no opportunity of prosecuting my enquiries respecting the road to Kelat, that was consistent with the indifference which my disguise obliged me to affect on all subjects, particularly those connected with the country. Communication by this route might easily be established, and with great advantage between the army of the Indus and the Scinde Reserve. Cossids arrive daily with native letters for Affghan merchants; and for the established rate of pay, which is twenty five Kelat rupees, (equal to six rupees and one quarter Bombay) reach Kurachee in thirteen and fourteen days from Candahar. One word from Mehrab Khan would render the whole line of road perfectly safe, and even under existing circumstances, small packets might be transmitted with little chance of their being lost or intercepted. Every thing I heard, went to confirm the account given me by the Affghan horse dealer. The many intelligent persons who I interrogated agreed in pronouncing the road to be quite practicable for wheeled carriages, excepting over the ghat at Baran Lakh; and there the difficulty is stated to arise, not from the steepness of the acclivity, but from large loose masses of stone which might readily be cleared away by the Pioneers of an army, so as to admit of the passage of guns. The usual difficulties experienced by an army, must of course be anticipated here, as elsewhere; but water, forage, and supplies are represented to be generally speaking abundant after passing Beilow—the scarcity which at present exists in the state of Lus, being chiefly attributable to the failure of rain, for so many consecutive years. The province of Lus is represented to be a level and nearly barren amphitheatre, extending betwixt the converging mountain ranges

of Hala and Pubb, in the form of a parabola,—or more correctly speaking of a compressed horse-shoe—the base resting on the sea, and Beilow the capital, standing at the vertex. This is a large walled town with houses of the same rude construction as those of Sonmeanee. Together with all the villages of any consequence, it is situated on the Poorallee, a river of considerable size, which after traversing the whole length of the province, discharges itself into the bay of Sonmeanee, and is influenced by the tide to the distance of twenty-five or thirty miles from the mouth. By those who had recently travelled from Beilow, I was told that not one blade of grass is now to be seen throughout the whole country. It is in fact in the last stage of desolation; a famine and a pestilence have stalked forth through the land, and are destroying both man and beast. In April last, the cholera, after passing Kurachee, travelled westward; and having swept off the inhabitants of Sonmeanee as already stated, half depopulated the capital, and obliged the Jam, (who is quite a youth,) to fly to the hills, where he tarried many days, permitting no one but his personal attendants to approach him until the plague was stayed. The province of Lus is little cultivated, and is principally famous for its breed of camels; but of these, hundreds have died during the last year, and the rest have been driven towards the mountains where the country is less sterile, and where a scanty subsistence may be obtained.

My departure was fixed for 2 p. m., and I was not much pleased to perceive mine arch enemy Jafferah setting out on his return journey about noon. He had first dunned Rusheed Khan during two full hours for a gratuity in addition to his stipulated wages—gradually reducing the demand until it had dwindled to “a small piece of bread;” and failing with all his importunity to extort even this trifle, he roundly cursed the miserly Khan and his descendants to the hundredth generation. The riding camel upon which my journey was to be performed, having been sent to a convenient distance behind some sand hillocks, I quitted the society of Rusheed Khan and his myrmidons without many regrets, and took my seat behind the least agreeable *compagnon du voyage* with whom it has ever been my evil fortune to be associated. Upon his ill favored countenance the words villain and cut-throat were graven in not to be mistaken characters. Rank odours exhaled from his filthy person, nor could he speak any language of which I comprehended a single syllable. At the distance of a few miles from Sonmeanee we were met by several armed Belooches, who as a matter of course replied to my salutation of Salaam Alaicum—Alaicum Sulaam—and

would have passed without noticing me further, had the fellow not checked the camel, and gratuitously confronted me with them. "Hollo" said one in Persian, "you are a Feringee?" "God forbid" replied I, "I take the Prophet to witness that I am one of yourselves." "Whence come you, do you bring news of the defeat of the infidel army?" "No, I am a Turk journeying from Caubool to Hindoostan, where I have long resided, as my Father did before me." "Well you look vastly like a Feringee dog"—"And suppose I were, have you any thing to say to me." "Nothing" replied the spokesman, "Khooda Hafiz" and we continued our journey.

The first twenty miles were performed in excellent style, after which the dromedary appeared completely knocked up, and it became necessary for some reason which I could not comprehend, to shift the saddle every ten minutes in the most gloomy and suspicious parts of the road. On these occasions the Belooche and myself eyed each other as if with the design of measuring our relative strength. Although greatly inferior in point of bulk, there was in respect of accoutrements, a clear preponderance in my favour; nor did I fail to make a most ostentatious display of my weapons, repeatedly intimating by not to be mistaken signs, that each pistol would at all events be sufficient to place one assailant *hors du combat*. About midnight the fellow again removed the saddle and motioned me to sleep; nor was it without the greatest difficulty that I could abstain from complying with his advice. After the lapse of some time, he returned, bringing an armful of tares in pod, that he had stolen from a neighbouring sheepfold, and upon these, he, as well as the camel, feasted heartily. Arriving near the defile of Jhallawan, we encountered a gang of Belooches who had been on a camel-stealing expedition, and who, judging from the booty they had with them, must have been rather successful. Leaving me standing in the road, my guide retired behind a bush with one of the thieves and after a long conference, I was permitted to proceed unmolested. Upon reaching the Hubb river at day break, however I had great difficulty in restraining my friend from indulging in his predatory propensities by the appropriation to his own use of a stray heifer from a herd that was browsing by the road side. Little else of interest occurred during the journey; which, owing to the fatigue of the camel, was an excessively tedious one. It occupied twenty eight hours, and the sun had set on the 31st before I dismounted at the door of my tent in the British Camp at Kurachee—feeling



fully prepared by my visit to the province of Lus, to be reconciled to any part of the world in which my future lot might be cast.

## II.—*Short Topographical and General Description of the Cape of Aden.* By Captain R. Foster, Engineers.

[Communicated by Lieutenant Colonel T. Dickinson.]

This Cape appears to me to be entirely volcanic. The horse-shoe shaped hollow to the eastward, seems to have been once the crater and was formerly (probably) a tolerably perfect circle of about one, or one and a half miles diameter.

The range of hills to the northeast called Munsooree, and those to the south from Scera to the peak above the temple of Hydroos, appear as if they had once joined, and had been subsequently rent asunder, thrown outwards, and canted in opposite directions by some violent eruption which forced an opening to the sea between these two points, and formed the narrow valley and bay where the ruined town of Aden now stands.

This opinion seems strongly supported by the singular formation of the elevated steppe between the valley of Aden and the base of the high hills of the Shumsun range.

This steppe which for the most part rises perpendicularly from the valley to a height of from three hundred and fifty to four hundred and thirty feet, is crossed in the directions shewn in the plan, by fissures equally perpendicular, and nearly equally deep, which gradually decrease as they recede from the face of the cliffs in the valley towards the mountain ridge behind, and end in narrow cracks of from thirty to fifty feet deep, and five or six feet wide.

The mountain ridge which encloses the whole hollow rises from one thousand to one thousand and fifty feet above the steppe just described, and presents nearly the same average height among its various peaks, between the points marked A and B.

At the point B however there is a break, the range drops suddenly and its height gradually, though irregularly, decreases towards the northern Pass, at which particular point there is an abrupt division of the whole chain, leaving the Pass itself (which is merely a rift through the rock of some eight or ten feet breadth and twenty or twenty-five feet height) with an ascent of little more than two hundred feet; beyond this Pass the ridge again suddenly rises, and regains a height of six hundred and sixty feet at Munsooree, from whence it abruptly descends into the sea in various ramifications.

From the point *A*, again on the opposite end of the high ridge, the whole circle appears to have been more violently disturbed, the height is more suddenly and rapidly reduced, and though the line is distinct enough to the end of Seera where it rises to about two hundred and thirty feet, still an intermediate part is submerged several feet under the sea.

The similarity of the general contour of this Cape to the volcanic islands in the Grecian Archipelago, as depicted and described in the 2nd vol. of Lyell's *Geology* is remarkable, and the specimens of the different rocks which I have the honor to submit for the inspection of the Society, though they cannot prove the positions I assume for the crater, will at any rate point out its volcanic origin.

The numerous ridges which spread outward from the south and southwest towards the sea, are extremely bold and rugged, and many almost, if not quite, impassable to the human foot: they are extremely narrow (scarcely affording a footing on the summit of the ridge) exceedingly steep, perfectly bare, and run at a great height to the water's edge when they suddenly terminate in bluff scarps of several hundred feet in height.

On the faces of these scarps of the southern coast which give perfectly perpendicular sections of the ridges, the lines of the different beds of lava are most distinctly drawn, but their number was greater than I could count distinctly from an open boat.

Towards the west the character of two or three of the tongues is slightly varied, and they spread out in broader spaces and sink towards the sea at lower levels, as shewn at Tar Shayed Moorbut, &c. These two have a more scaly appearance than the rest, and the colours of the scales which seem to overlap each other like those of an oyster, vary from black to brown, brownish yellow, red, grey, and greenish grey.

The main direction of each branch is in a straight line from the summit of the cone towards the sea, and the valleys or ravines between them, are nearly level from the water's edge to the bases of the hills, and their surfaces present nothing but sand, shells, shingle and pebble, with short shrubs scattered about them.

The hills as well as the valleys are totally destitute of any thing like wood or herbage. In different crannies small plants are found, and low stunted thorny bushes in Western Bay, and a few of a larger and better growth in the bottom of the fissures and in the valleys to the southwest of Shumsun, in one of which a few bushes of the Senna tree and common milk bush of India had reached a height of

seven or eight feet. There is also a creeping prickly bush, bearing a fruit which the Banians use as a vegetable, something similar to the brinjal which is not uncommon.

Dried specimens of the herbs and bushes are submitted for inspection with labels of the native names and uses attached.

There is not the slightest sign of any present or former cultivation in any part of the Cape, and in fact except on the elevated steppe above the town of Aden, there is nothing bearing the appearance of a soil or earth to be found any where on the surface. Many are of opinion that the whole of this is too much impregnated with salt to allow of vegetation, but even supposing this not to be the case, there is still the want of water near at hand which cannot be got over \*

The supply of water at Aden is one of the most curious features of the place. It is found at present in the valley of Aden Town only, and close up under the cliffs, and at the opening of the fissures from the steppe above; in the valley there may be upwards of one hundred wells chiefly dilapidated and choked up, but some piercing to a great depth, and yielding abundant and excellent water.

The whole of the inhabitants, troops and all, were supplied during my residence there, from only four of these wells, and notwithstanding this heavy draw on their contents, they were reduced but a very few inches in a space of seven weeks.

In one which supplied the troops at the Turkish wall, and which was upwards of 103 feet in depth, the water seemed always to be in strong commotion, acted on by some lower spring or some other cause, its surface was never a moment at rest but its water was beautifully clear and good.

The mode of building adopted for these wells is very striking and singular; they are generally circular, of from 3 to 5 feet in diameter, but built entirely of small sized stones perfectly undressed, generally rounded or irregular at the edges, and without a particle of mortar or cement of any description.

Whence or how the waters of these wells is supplied is rather a puzzling question, rain of course falls there occasionally, but I doubt much if ever with any periodical certainty, or in any great quantities, except in case of some extraordinary and sudden tem-

\* The few Officers who tried to rear some plants and vegetables were obliged to obtain mould from the interior, from whence it was brought in bags on the backs of camels.

pest: only one short shower has fallen between September 1838 and June 1839.

If the rains were heavy, each of the valleys would naturally have a water course cut deep and sharp by the water rushing from the hills, but no such water courses exist, and the water that falls on the east of the Shumsun range (or nearly two square miles of surface) is carried to the sea by the one nulla shewn in the plan; yet this nulla has nothing like high banks till close to the sea, where its course has been turned round a building which is said to have formerly been a *tide Dock*, and further, frail huts of reeds and rafters are built in its very bed, and have been standing there for years.

This valley of Aden is the only one where any water course can be clearly traced to the sea at all, as all the rest are invariably lost in numberless little divisions and branches among the sand and pebbles of the beach.

These facts seem pretty conclusive against the certainty of any heavy periodical rains, nor does it appear that any great supply of moisture is derived from the clouds and mists, it is true they frequently envelop the Shumsun hills when all is sunshine below, but though dense, they are dry, at least I found them so, having passed one night perfectly exposed to them in the open air on the summit of the Shumsun range, and remained wrapped in a thick fog till about 8 o'clock in the morning, and yet found neither my clothes, or even my drawing paper at all damp, nor observed any appearance of moisture on the rocks.

All the wells near the beach at Aden, are bad and brackish, and whether the good ones higher up the valley are entirely supplied from springs furnished by the rains lodged in these narrow but deep and porous beds, or whether they are partly supplied from the sea, the water being purified by further filtration [?] it is impossible for me to say.

The question, however, is one of great interest and importance; if the former supposition is correct, the supply might fail after seasons of drought, but if the second is correct, then the security for the supply is unbounded, and giving up the tanks altogether a few good sized wells would answer all demands.

Vestiges of former wells still exist in western bay, and from the similarity of position and character of the bays to the W. and S. W. I have no doubt that water may be found in them also; in one or two old wells lately opened the water was found bitter, the flavour was attributed by the natives to the roots of some bush, but

might not that be owing to the presence of certain minerals, with great varieties of which the whole peninsula abounds?

One of the most remarkable features in the character of the country is the extraordinary number of dikes or veins of different descriptions (of which specimens are sent) which cross the whole peninsula chiefly from E. to W. or N. E. to S. W. in one continued straight line, following the varying level of the ground from the lowest valley to the loftiest hill, but still holding an unbroken line from sea to sea.

Looking at the long dead flat of sand which joins Aden to the main land by a narrow isthmus, and extends beyond for several miles, and which scarcely rises two feet above the high water mark on either beach, one is naturally led to conclude, that as the low water mark is still receding according to the evidence of the present generation, that Aden was on its first production in early ages an island. It appears that the sand is steadily accumulating; centuries, however, must elapse before it can affect the noble western bay.

The climate of this singular Cape is as yet but little known, during the months of March and April, the thermometer seldom rose to  $90^{\circ}$  but since then it has mounted to  $100^{\circ}$  and  $103^{\circ}$ . In those months, I found the difference of thermometer between the level of the town and the steppe above it, to be about  $4^{\circ}$  or  $5^{\circ}$ , and between the town and the summit of the Shumsun range a difference of  $7^{\circ}$ .

The range of a thermometer in the open air on the top of Shumsun from the afternoon of the 14th March to the afternoon 15th March, was as follows.

14th at 6 P. M.	$76^{\circ}$	} A dense fog all night and till 7 A. M. but no dew apparent.
15th at 6 P. M.	$71^{\circ} 30'$	
" 2 30 P. M.	$99^{\circ}$	. . . In the sun.
" 2 30 P. M.	$79^{\circ}$	. . . In the shade of a small Bechoba.

Water boiled at the same spot at  $208^{\circ} 30'$  and on a tower on the peak above it at  $208^{\circ}$ .

Being destitute of trees or herbage Aden possesses but few specimens of birds or beasts. Pigeons, cats and rats are the most numerous, and the two latter most troublesome; a very few of the following may also be found by search, such as wild goats, black monkeys, grey foxes, and dwarf hares, among the animals; and a few kites and gulls among the birds; it boasts I believe neither sparrow, crow nor any other bird at present.

The bays abound with fish of all sorts, and many of an excellent

description, they form of course the staple food of most of the inhabitants, but beyond its fish, and its water, and the plants and bushes before described, Aden produces nothing to support life and must for ever be unfortunately dependent on external resources.

As regards the ruined town or village of Aden itself (of which I have somewhere read most flowery and extravagant descriptions) I would wish to say but little. It has been described as abounding with "monuments of departed grandeur;" with, "elaborately carved marble monuments;" with ruins of "marble baths;" and other glorious relics of unrivalled skill and cost." If these ever did exist, they have, alas! and indeed melted rapidly away "like the baseless fabric of a vision" and literally "left not a wreck behind."

The style of building used in the wells as described above—is the style universal in all the buildings of every description of which I could find a vestige; from the Sultan's paltry palace or the Hydroos temple, to the still more wretched tenement of the poorest Jew, there is apparently but one system, three or four rows of loose undressed stones, then a horizontal bond of crooked rafters, and so on alternately, stones and rafters, stones and rafters, to whatever height or shape required. There are no brick habitations at all, though there are a few brick arches in some of the mosques, and two broken minarets of the same materials, the other dwellings are but huts of reeds, and rafters and leaves, and they are in my opinion more cleanly, airy and wholesome, than their more pretending neighbours.

The inhabitants of the place consisting chiefly of Arabs, Jews, Banians and Abyssinians, were at the period to which I refer, about one thousand in number, and corresponded with their dwellings in the poverty of their appearance. All seem to have suffered under some grinding oppressor, presenting considerable contrast and novelty in the various styles and colours of their dresses but all ragged and dirty with the exception of the Banians.

These last are, I believe, all of Cutch or Indian extraction, and resort there in early life, and gradually acquire the knowledge of the language so necessary for the purposes of their trade. The Arabs appear a small race, and not at all superior in shape, size, or looks to the common Mahratta. The Jews have the usual characteristics of their race very strongly marked, but though naturally lazy, they seem able and willing workmen if actively superintended; the Abyssinians are however the best built, and the most muscular of all.

All the labouring inhabitants will now make a golden harvest, their food costs them about three Mussooree a day, or about perhaps one rupee and one anna a month. Formerly I suppose employment was scanty and pay small and doubtful, but now they can all find ample work and receive regular wages of from 12 to 30 Mussooree a day according to their craft, or from 5 to 11 rupees per mensem.

Very little trade was carrying on at the time of my visit, and less in the way of manufacture, but some of the Jews spin and weave a coarse kind of cotton cloth, and have among them silver smiths,<sup>o</sup> copper smiths, and stone cutters, and the Abyssinians or Somaulees make baskets, mats and fans, which they plat very neatly from leaves of different sorts either of palm or bulrush, which they obtain from the interior.

The bazar at Aden was the most confined and dirty I ever entered, consisting of a single alley about four feet wide and seven or eight feet high and perhaps some twenty yards long, the whole covered over and obscured with rags and matting; on either side of this alley on a broad step, elevated about three feet from the ground, the dealers squat in the midst of their goods, and the myriads of flies and insects of all descriptions attracted by the drugs and dates, and the compound of villanous smells of drugs and dried fish which impregnate the air in this confined space, render it almost past endurance.

Aden has evidently been a populous place in former ages, but that it was ever a grand city, or at least possessed specimens of its grandeur in substantial public buildings, is evidently a fallacy, all the existing facts prove the reverse. We learn from history that its possession has been long and hotly contested by different powers in early times, as indeed is shewn by the ruins of watch towers perched on all the points of the hills, many of which are now inaccessible; we read also that it was at one time a great mart for gums and drugs—which trade has long ago vanished from its ports and been since enjoyed by Mocha. Its fate has been but the type of that of many a mighty nation; it flourished and has fallen. We may hope, however, that under a firm but mild Government the tide of commerce may gradually revert to its original channel, and Aden arise from its present state of ruin and degradation, to more than its former renown.

[NOTE BY DR. BIRD.—Captain Foster's opinion of the volcanic origin of Cape Aden, and the coast in its neighbourhood, is sup-

ported by the accounts which the Arab historians give of an existing volcano in this district. In A. D. 943, Masudi, speaking of the production of naphtha, and alluding to the volcanoes in Sicily, and the kingdom of the Maha Raj, says, "next to these is that in the desert of Barhut, adjacent to the province of Násafan and Hadramaut, in the country of Shahr, (the Arabian coast from Hadramaut to Aden) the noise of which is like thunder, and to be heard many miles distant. Whenever small things are dropped into its mouth they are not returned, but the sparks which issue from it are like red hot stones, which are reduced to this state by the strong heat of the caves." ]

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III.—*Some observations upon Sind and the River Indus as far up as Bukkur.* By Lieutenant R. N. Magrath, H. M. 3rd. Regiment of Foot.

[Communicated by Dr. Morehead.]

In considering the geographical character of Sind, the Delta formed by its mighty river, naturally attracts attention in the first place; and you are disposed to compare it with those of other great rivers such as the Nile, and the Ganges. It has been my good fortune to have travelled upon each of these celebrated streams; and I have carefully observed and noted their most striking and remarkable features.

1st. There is a very close resemblance and affinity between the Deltas of the Nile and Ganges; whereas the Sindian Delta differs from both in several essential characteristics. Both the Nile and the Ganges during their course, overflow vast tracts of country; and consequently present extensive surfaces of water to the effects of evaporation. This evaporation must in a great measure diminish the volume of water which would otherwise reach the sea; and it will also decrease the velocity of the stream or streams, by which the river empties itself into the ocean.

2d. Again, both the Nile and Ganges flow through rich loamy soils, and the detritus mechanically suspended in their waters is of a thick, muddy, and heavy nature, which speedily subsides, when the water ceases to be much agitated. This is particularly the case in the Nile, where I have taken a tumbler of its thick muddy water, and allowing it to stand for a few minutes, have observed the sediment to sink rapidly to the bottom, leaving a clear, pleasant drinking water above.



3d. In lower Egypt, the traveller sees no hill of any eminence in going from Alexandria, till he comes quite close to Cairo, about ten or twelve miles below which it is that the Delta commences. The same observation applies with even more force to Bengal, where you may sail four hundred miles up the Hoogly and Bhagarutty, (which form the western limit of the Gangetic Delta) through a country literally as flat as a bowling green.

The three foregoing remarkable characteristics, common to both the Nile and the Ganges, are wanting to the Indus. 1st. The Indus does not expand itself to any considerable extent over the country through which it flows.

2d. In lower Sinde this great river traverses a strip of land nowhere more than one hundred miles wide, and bounded on the one hand by the great sandy desert, and on the other by the Hala and Lukkee ranges of barren unproductive mountains. The stream washes down loose, silty and sandy detritus, which does not easily subside, and which requires time and care to be cleared so as to be fit for drinking.

3d. In going up the Ghisree creek, which was formerly the westernmost estuary of the Indus, the traveller is never out of sight of a chain of rocky barren hills. The same observation, generally speaking, applies to the course of the river upwards from Tatta to Sewun. A little below Jurruk, and again at Gopang the chain of hills comes quite close to the river's edge. From Majindu to Sewun also, the mountains are all the way visible from the river, and near the latter place, the base of the chain is washed by the stream.

I certainly had only an opportunity of visiting the skirt of the Delta between Kurrachee and Tatta, but from what I did see, and from the abovementioned facts, I should conclude, that the soil generally, is not so fertile here as in Bengal and Lower Egypt; that the rich land is every where in these latter countries, but that, in Sinde, it lies only in patches here and there.

To give an idea of the light sandy character of the detritus carried down by the Indus, I may here remark, that to the westward of Churna Island, fifty miles from the Pittee mouth, I observed a strong current of whitish water running three knots an hour over the heavier body of sea water. The point of separation between the two kinds of water was easily discernible in heaving the lead.

I landed at Kurachee on the 5th June, and remained a week in the camp of the 40th Foot. The ground on which the camp is pitched is a sandy plain, with prickly pear bushes scattered over it. The heat is not so great as at Bombay, and the nights are very cool and refreshing. But the clouds of dust perpetually flying during the

day, constitute a real torment, and completely frustrate every attempt at cleanliness. The 40th Regiment, little above six hundred strong, had nearly eighty men sick.

The sail up the Ghisree creek to Garrah is interesting. The distance is estimated above forty miles, and we performed it in six hours, having a stiff breeze and strong tide in our favour. You sail amidst numerous flat islands, which are covered at high tides, and full of mangroves.

Garrah is an assemblage of mud hovels, half buried in drift sand. From here to Tatta by land, is reckoned twenty-one miles, and there are several patches of rich land. The communication by the Ghisree creek with the main river has been banked out in some of the former wars; and it is said that it could be reopened for ten thousand rupees. This would be a most useful undertaking.

The city of Tatta is composed of upstairs flat-roofed houses, some built of dust coloured brick, but the greater number of *wattle and daub*. The only remains of its ancient grandeur are a fine old serai in the town, and the numerous elegant tombs or mausoleums in the neighbourhood. These are of most tasteful architecture, and exquisitely ornamented with Mosaics, but, like every thing else in this country, are in a state of ruin.

We were six days going from Tatta to Hydrabad; although the distance, even by the river can hardly be estimated at more than seventy miles. The river however, serpentine much more than the maps would lead one to suppose. The scenery is by no means so beautiful as on the Ganges; and the general level of the land is higher than the surface of the river, and consequently it cannot be irrigated with the same facility as Bengal, where the reverse is the case. The people on the banks of the Indus, cut little narrow canals running a short way in from the river's edge; and from these they raise the water by means of what are called (erroneously, I think,) Persian wheels. These wheels are worked in lower Sind by blindfolded camels having rope traces on *\* both sides*; but as you go higher up the river, you gradually find bullocks substituted for camels. I should think that the Persian wheel; such as is described in hydrostatic treatises, and which is worked by the force of the running stream, might be adopted upon the Indus with much advantage.

The shores of the river generally are covered with tamarisk

\* I mention this fact because, when I saw a gun drawn by camels at Bombay, there was but one trace to each camel, which appears to me to have been a mistaken arrangement.

bushes, which are sombre, melancholy looking shrubs. There are no bamboos to be seen any where. The timber of the baubul is used for the purposes to which the bamboo is applied in the Bengal Presidency. The baubul is a very pretty tree, and in some of the shikargahs, or hunting preserves, there are beautiful fringes of it running along the water's edge.

It is curious to observe the way in which the famous fish, the Pul-la, is caught. You see numbers of men floating down the stream, upon inverted chattees, or earthen jars, with long handled nets; and great numbers of the fishermen support themselves in the water merely by means of the net handle. A third part of the fish taken belongs to the Ameers.

These rulers engross the richest tracts of lower Sinde for shikargahs or hunting preserves. This practise is not only injurious to the country by preventing its most fertile districts from being cultivated, but it is also a most serious obstacle to the navigation of the river; inasmuch as the trees in these shikargahs grow on the very edge of the water, and sometimes even actually in the river, so that there is no tracking path left for the boatmen.

The Ameers also levy a most impolitic tax upon each water wheel, amounting I am told to five rupees a year.

The party with whom I travelled (consisting of three other Officers beside myself) stopped at the Residency at Hyderabad for a day and a half. The small residency bungalow is situated on the bank of the river, from which the city is distant above three miles. The city is mean in appearance, inferior to Tatta, and has fewer upstairs houses. The Fort, I should say, is about a mile in circumference, the wall following the contour of an irregular rocky eminence, averaging from twenty-five to thirty feet higher than the level ground, and the wall itself being about as high again. It is a mere loop-holed arching wall, and would give way to a common field battery in a few hours.

We left Hyderabad at 11 A. M. on the 27th June, and on that day and the following made much better progress than we had as yet done. On the 29th, between Gopang and Majindu, I observed some very fine fields of indigo, and got a very fair specimen of the manufacture. They dry the plant here in the first instance, and manufacture it in the rudest way, having no regular vats.

On the 30th, above Majindu, we found the river to divide itself into several narrow channels winding through a low flat. At night we were moored beside a thick jungle of tamarisk bushes, filled with flies and musquitoes. Hitherto, although the days had been some-

times rather hot in Sindé, the nights were always cool and refreshing; but at this spot the night was steaming hot, and I never remember to have been so tormented by mosquitoes anywhere else. This overpowering heat, and annoyance from mosquitoes and sand flies, continued for about ten days.

On the 1st July we passed through a country exhibiting a more cultivated appearance than any we had yet seen. The Hala mountains in the back ground were distant five or six miles from us in the morning; but towards evening we came to a part of the river which washes their base. At sunset we moored on the right bank at the junction of the Arul creek and the main river.

From this period up to the 15th July, we were traversing the really rich and productive portion of Sindé. We here left the Indus altogether and went \* *down* the Arul river or creek, which flows into lake Munchur; then, across the lake, and up the Nara creek, which also flows from the Indus into the lake. What becomes of these two bodies of water flowing into lake Munchur is a question yet to be determined; whether they are entirely absorbed by the evaporation from the surface of the lake, or any portion of them escapes by percolating through the Hala mountains, which form its western limit.

The Nara is represented on the maps as having a course nearly straight; which is a serious mistake. Its name in the Sindé dialect signifies a snake; and certainly no serpent could twist himself into more complicated sinuosities than does this remarkable stream. In the portion of river nearest to the lake, its surface is higher than the level of the surrounding country; but in so trifling a degree that a small bund or bank little more than a foot high, suffices to protect the land from inundation. As you approach the Indus however, you observe the level of the land to increase gradually.

The villages along the banks of the Nara, are generally of the most wretched description; and notwithstanding the great richness of the soil, the inhabitants appear poor and filthily clad, and quite as miserable as the Egyptians. Both these nations are in infinitely worse circumstances than the Bengalees; although the latter may perhaps be ranked amongst the most humble tribes of mankind;

\* Since I wrote the above observation, I have met Officers, who came up the country by the Munchur lake; and at the time they passed through it, the Arul was running from the lake to the river. I take it for granted, that at that period, the surface of the lake was higher than the surface of the river while the reverse was the case when we passed. I cannot think of any other way of accounting for the fact.

and are both physically and morally inferior to either Egyptians or Sindians.

I observed several mud granaries, such as are everywhere seen in Egypt ; and I also remarked extensive cotton plantations, but very little indigo.

We were thirteen days in going from Sewun by the Arul, lake Munchur, and the Nara, back to the Indus again.

As to Sewun, it is a poor town of the same description as Hydrabad ; but there is a very singular high mound, or fortification in ruins, which the Tindal of my boat said was built by Secunder (Alexander the Great). While moored here for four hours, the reflected heat from the mound was most overpowering. Indeed in this part of our journey, we suffered greatly from heat, and were but rarely blessed with a cool night.

Lake Munchur is a very fine sheet of water, about eighteen miles long in the part where we passed over it. Its beauty is a good deal spoiled by its surface being in some places covered over with quantities of the lotus, and in others with long rushes. The lofty hills to the west are quite bare and desert.

One day, during our progress up the Nara, two or three groups of natives came near the boats, using insulting language and menacing gestures, and asserting that an action had taken place between our troops and Dost Mahomed, in which the British, they said, were defeated ! I may here remark that although the Sindians are fine strong men for Asiatics, they are lazy, dirty, conceited and insolent in the extreme. A vigorous government, a strict police, and a severe magistracy would, I have no doubt, improve their character wonderfully !

We were only a day and a half in getting from Nara to Sukkur, where we arrived on the 17th having experienced a storm and torrents of rain the previous night.

Sukkur, Bukkur, and Roree form decidedly the most interesting objects we had as yet met with in Sindh. Here the Indus would appear to have left its natural course in order to break through an obstacle in the shape of a long range of rocky heights from about one hundred to one hundred and fifty feet above the level of the river.

It bursts through this chain in two channels, which enclose the small fortified island of Bukkur ; the works of which are at present in a ruinous and decayed state. It is, notwithstanding a very picturesque object. On the left bank is the well situated town of Roree, adorned with a handsome mosque upon the water's edge. The

channel between it and Bukkur is about four hundred yards wide, and that between Bukkur and Sukkur about one hundred. The limestone heights on the Sukkur side constitute a superb natural tête-du pont. A little blasting with gunpowder to scarp away the sides of the heights, and very trifling aid from the Engineer's art, judiciously applied, would render it a fortress of the first class. On top of these heights there are some fine ruins of tombs, and there is a round watch tower or minâr, from the top of which the view is truly beautiful.

The whole line of country from Sewun to Sukkur is extremely rich and productive; and I am strongly disposed to think it capable of furnishing supplies to an army of any strength, that is to say, if recourse be had to forced requisitions, an equitable price being paid for the articles required.

In its present state, the Indus between Tatta and Bukkur is by no means so navigable as the Nile or Ganges. In order to become so, the nuisance of the shikargahs and Syuds gardens must be swept away, and the jungle on the banks cut down, so as to leave good, practicable tracking paths.

#### IV. — *Narrative of a Journey from Zeila and Tadjourra on the Coast of Abyssinia to Ferri, on the frontier of Esfat; in April and May 1839.*

[Extracted from a letter addressed to J. Vaupell, Esq.]

As our guide Ali intends to return tomorrow to his country, I profit by this opportunity to inform you of our safe arrival on the frontiers of Esfat. The letter I wrote you from Tadjourra on the coast is, I hope at present in your hands. We left Tadjourra on the 26th of April. Our way took us at first in a western direction along the Gulph of Tadjourra, extending a good way into the interior of the country. At that time we did not think that we should have a thirty-six days' journey only to the frontiers of Esfat, having been informed at Mocha that we should be able to perform the whole journey in nine or ten days. On the third day after our departure we began to ascend the mountains, which are here not so high as those in Tigré, therefore camels are used on the whole way. The names of the stations through which we passed the first part of the journey, are Anbabo, Dullul, Sagallo, Sokti, and Wardalliwan. These however are only places of encampment for caravans, there are no villages, nor places which are inhabited, at least at this season, when the people for want of water have left all the places in our route.

The Danakil are a wandering people moving from one place to another, where they can get water and food for their cattle. They do not live in regularly built houses, but in huts of thorns, on the top of which they put straw or mats. The whole nation consists of many tribes, the number of which we could not learn. The most powerful tribe is that of the Shodeitos, who dwell from Beglol on the Red Sea to the neighbourhood of Efat. Another tribe is called Dewine, which is on good terms with the tribe Wéma, to which our guide belongs. Nearly our whole way took us through the country of these last two tribes, which are often at war with the Shodeitos, and several years ago killed seven hundred of them in a battle near the mountain Badu, in the neighbourhood of Error; the former is the native place of our guide. The language of all the tribes is the same, viz. the Dancalli, which is spoken over a large extent of country—from that of the Somalis to Massowa, and from the coast to Efat and the Galla countries. The language of the Shohos near Massowa is the same with the Dancalli. They are all Moslems, being very much attached to their religion. They however maintain a friendly connexion with the Christians in Efat and Shoa, and with the coast of Arabia. They carry wheat and cloths to their country, and import salt to Efat. They wear shields and lances, but not arrows like the Somalis their neighbours, who use poisoned arrows in battle. They take however soldiers from the Somalis. The tribe Wéma thus feeds and maintains one hundred men bearing bows and arrows. The name "Dancalli" (which is the singular, Danakil being the plural) is an Arabic denomination; they call themselves Affar, (which reminds one of the Latin *affer*, Africans;) Adael or Adali is a general term like the expression Franks.

On the fifth day of our journey we saw the Gulph of Tadjourra again. This Gulph extends nearly to the salt grounds which we saw on reaching the station Dafarréh. The salt grounds are about six miles in length and three in breadth. To the west they have the appearance of snow, and on the eastern side, of water. Before we reached this place we observed many indications of volcanoes, which probably have been instrumental in the formation of the Gulph itself and of the salt grounds.—This neighbourhood, as well as many others in the Dancalli country, might prove highly interesting and important to geologists. These salt grounds supply the country of the Danakil and Efat with salt; therefore if any foreign power should ever be involved in a war with the Danakil, it would be an easy matter to take their country, by vessels proceeding up the Gulf of Tadjourra, and taking possession of the salt lands; which are situated quite close to it.

The Gulf should however previously be surveyed. The road, before reaching the salt grounds is very bad for camels, owing to the stones, and it is necessary to go a good way round about; this is one reason why they do not like to load their camels too heavily.

We found the climate very hot at this season in these places, as well as on our way in general, till we came to the river Hanash. At Dafarréh near the salt grounds, the thermometer stood in the afternoon at one hundred and five and one hundred and ten degrees of Fahrenheit; near the Hanash we found it at ninety-six degrees. We have undertaken the journey in the hottest season, which caused us often to take water with us for several days; at other seasons water is found nearly everywhere. Leaving the salt lands behind us we passed through several beautiful valleys, in which our animals found both grass and water. The large valley of Gagatc lies three or four days journey towards the south-west from the salt grounds. It is a pity such beautiful spots are not cultivated.

At Gagatc, a caravan coming with us from Tadjourra separated itself, going to Aussa in a more northerly direction. Aussa is one of the most important places in the country. It is situated near the Hanash, which forms there a large lake, being obstructed in its course by the elevation of the country. From Tadjourra they reckon twelve days to Aussa, from thence nine days (journey) to the dominions of the powerful Galla Prince of Argobba, whose name is Bera, and with whom the king of Shoa has been at war for several weeks past. From the possessions of Bera to Gondar they reckon nine days. Thus I was informed by one of our men. Another beautiful valley through which we passed, is called Gobaad, in the neighbourhood of which the river Hanash is to be seen, when the air is clear. We however could not see it owing to the haze. In a south-westerly direction from Gobaad is Ramúðële, another beautiful valley, where we saw at first numbers of wild asses. Our Danakil killed one, and dressed and ate the meat with a good appetite. Having passed Ramúðële, we crossed over a mountain about six hundred or seven hundred feet high. We did not go the usual way, having been informed, that the tribe Galeile, which is at enmity with the other tribes, was in the neighbourhood not far from that road. After going a good way round about we came to the station Aful, where are several hot wells at the foot of a mountain. On the 18th of May we arrived at Mullret, the dwelling place of the father of our guide Muhamed. From whence we had still ten days to go to the frontiers of Efat. We were quite near the country of the Alla and Ittoo Galla, of whom the Danakil are much afraid, being often attacked and kil-



led by them. The Gallas are obliged by law, to kill a certain number of their enemies, before they can obtain the rank of a chieftain; therefore they make always inroads into the countries of their neighbours, and kill every one they overcome. The nearer we approached the river Hanash, the more we found the country improved and peopled. At great Mulla we saw for the first time on our way, Elephants feeding in the grass, under the trees.

On the 29th of May, we crossed the Hanash, which at this dry season is about fifty-five or sixty feet broad; its banks are high fifteen to twenty feet, and bordered with beautiful trees; under whose refreshing shade, animals of every kind feed and repose. From thence we distinctly saw the high mountains of Esfat, which we had already seen, in the early part of our journey. On the 31st we reached the spot where duties are levied; we were received there by the custom master Musa Soleiman, and by Abbagos Muhamed, Governor of those parts of Argobba, which belong to the king of Esfat. A messenger was sent to the king, at present residing at Argobbole, to inform him of our arrival. At this place I afterwards met with the same man whom I saw at Mocha a year ago, intending to set out, after a few days, with a caravan to 'Tadjourra, taking with him a slave girl and a letter, which he was charged with by the king to deliver to me at Mocha. Having refused the girl we opened the letter, wherein the king wrote that we should come to him, bringing a good gun for him, and medicine for sore eyes; also a person skilled in building, for the king required a house and a church. We hope to see the king after two or three days, when at the meeting we intend to make him again acquainted with our object, and to solicit his assistance and protection.

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**V.—Narrative of an Excursion into the Hazareh Country of Bisút, and the districts of Bamian and Seghan.**

By C. Masson, Esq.

[Communicated by Col. Pottinger.]

On arrival at Kábul in May 1832, before proceeding towards Bamian, I considered it expedient to seek an interview with Táj Muhammad Khán, or Háji Khán as commonly called, who held the district in jaghire, as well to obtain from him letters enabling me uninterruptedly to examine the antiquities there, as to remove from his mind any unfavorable impressions that he might possibly conceive as to the motives of my journey. It was moreover incumbent upon me,

in another point of view, to pay my respects to him, as his treatment of me, when a visitor in the camp of Dost Mahomed Khán at Guzní had been of the most civil description. I resided at Kábul in a house of the Balla Hissar, belonging to Sulímán an Armenian, and but a few doors from that occupied by Hají Khán.\* I requested Sulímán to notify to the Khán my desire to see him, and was soon informed that the Khán would send for me by night, when few or no persons were present, that our conversation might be free and unrestrained. I also received a gentle rebuke for having been several days in Kábul without calling on him. After some time, I was summoned, and accompanied by Sulímán, repaired to the Khán's house. Passing a variety of dark passages, continually ascending, the buildings here being built upon the brow of a hill, I was finally introduced to the Khán, sitting in a small apartment, to enter which, we were obliged to creep, as the aperture of admission, or door, if it must be so called, was of very scanty dimensions. There were some eight or ten persons present of his own household, and I was saluted with a profusion of terms of civility and welcome, the Khán styled me *ruffíc* or companion, and rejoiced at seeing me again. He informed me that himself was going to Bamian, and that he should be happy if I could accompany him. He then entered into a florid description of the interesting objects at Bamian, the immense colossal statues, the samúches, the ruins of Gúlghúleh, and the castle of Zolák which he pourtrayed in a very lively manner. He then gave an account of the metals to be found in the hills, asserting there were gold, silver, copper, lead, antimony, &c. &c., adding that he and his people were khurs or asses, and did not know how to extract them. The affairs of Turkey, Egypt and Persia, were also duly discussed, and the Khán alluded to Buonaparte, affirming he had been told, that his son was to prove Dudjál.\* After a long desultory conversation, the Khán, coming to the essential point, acquainted me that owing to Mússulmání scruples, he should not march from Kábul until after the 13th of the next month Suffer, (it being considered unlucky to do so) but he hoped that I would wait till that time. In the interim he desired me to amuse myself freely in the environs of the city, and telling me his horses were at my command, I received my dismissal.

The 13th of Suffer passed, and there was no sign of movement on part of the Khán—month after month followed, and it was not until the month of Rubbi-us-Sání that he left Kábul—which he did without signifying his departure to me. I might reasonably have felt surprise, but rather indulged the conjecture that the Khán was acting

\* Antichrist.

prudently towards me, and so it proved. As soon as he reached Bísút, he forwarded me a letter through Múlla Ibrahim Khán his Naib at Kábul—in which after begging many pardons for his forgetfulness of me, which he imputed to the multiplicity of his affairs, he earnestly entreated me to join his camp, whence he would expedite me in care of approved men to visit Bamian. He moreover directed Múlla Ibrahim Khán to provide attendants to escort me to camp. I now prepared for the journey, hired a yábú (poney) and engaged a neighbour named Yusef to attend it. It chanced that one Kumber, of Abyssinian extraction, who had formerly been Sirkerder or chief of the Haóbashes under Shah Mahmúd, and now in the Khán's service, was about to proceed to the camp, and hearing that I was going, came and offered his attendance and services. These were gladly accepted, the Sirkerder being a man of trust and valuable from his experience; and our arrangements being completed, it was decided that we should start from Kábul on the 4th of the Muhammadan month Jamadí owl.

We shall here premise such observations, as may be necessary to render intelligible the circumstances interwoven with the subsequent narrative. The Hazaureh districts between Kábul and Bamían, are collectively called Bísút, and mállia or tribute is enforced from them by the authorities of Kábul. This fluctuates in actual receipt, but the registered amount is 40,000 rupees. Some twenty or twenty-five years since, the superior chief of Bísút was Mír Wullí Beg of Kárzar. He was treacherously slain by an inferior chief the Vakíl Sifúlah at Siáh Sung (black rock) a spot in the valley leading from Kárzar to the vale of the Helmund. Mír Wullí Beg had twelve sons, the elder of whom Mír Mahomed Sháh became Mír of Bísút. The younger of these sons Mír Yezdánbuksh assembled troops, defeated and took prisoner the Vakíl Sifúlah, whom he slew at the same spot (Siáh Sung) where his father had been sacrificed. Mír Yezdánbuksh next directed his arms against his eldest brother Mír Mahomed Shah, whom he compelled to fly to Kábul. He now assumed the Mírship, but his claim was contested by an intermediate brother Mír Abbas. The fortune of Mír Yezdánbuksh prevailed and Mír Abbas suffered defeat, but the former alike unwilling to proceed to extremities with a brother, and anxious to secure to his interests a gallant soldier, tendered a reconciliation, which Mír Abbas accepted, and for some time resided with his brother. He was induced, however, to make a second struggle for supremacy, was again worsted and again reconciled, since which his obedience had been constant. Mír Yezdánbuksh the acknowledged lord of Bísút, turned his

attention to the affairs of his province, and by the humiliation of the several petty chiefs established a more decisive authority than any former Mír had enjoyed. Inexorable to the haughty and such as opposed his plans, he was equally careful of the interests of the subject, and his name was venerated among the Hazaureh. The high road between Kábul and Bamian led through his territory, and had hitherto been a theatre for forays and depredations, forays from the independent Hazaurehs of Sheik Ali, and depredations from the inhabitants of Bísút. By the energetic measures of Mír Yezdánbuksh, order was restored, the road became safe, the Hazaureh of Sheik Ali dared not make their appearance, and the people of Bísút became as eager to show civility as they had been before to offend, while the single traveller passed as securely as if in company with a host. To kaffilas, the chief was particularly attentive, and merchants were diligent in spreading his praises and renown. It was evident that a chief of superior ability had arisen among the Hazaurehs, and he became an object of much attention both to the Shías and government of Kábul. The former congratulating themselves in having a potent ally in case of need, the latter apprehensive of his views and of the effects of a consolidated authority in the Hazaurehjât.

It may be noted, that one of Nádír Shah's features of policy, was the colonization of the countries he conquered, and in pursuance thereof he encouraged settlement in Afghánistan by the various tribes of the vast Persian empire. At the time of his death numbers under such intention had reached Meshed, and were subsequently invited by Ahmed Shah Dúrání; while a large Persian force escorting treasure from India at that critical period were also induced to enter the employ of the new Afghán sovereign, and renounced their native country. Hence at Kábul, at this day, are found, Jewanshírs, Kúrds, Ríkas, Afshars, Buktíaris, Shah Sewans, Talishes, Bayats, in short representatives of every Persian tribe. Under Ahmed Shah and his successors, they formed the principal portion of the Ghúlam Khánu or household troops, and the appellation they still preserve. Like their fathers they are Shíahs by religion. They have exceedingly multiplied and become affluent, and decidedly are the most powerful and influential body in the city of Kábul, of which they occupy one half, and exclusively the quarter called Chandol which is fortified. They occupy also many castles in the vicinity of the city. An unextinguishable rancour is known to exist between the two leading sects of Mahomedanism, the Shíah and the Súní, which however, for a while dormant or concealed by consent of both,

is ever ready to burst forth upon the most trivial occasion, and this circumstance, has been taken advantage of by the intriguers of Kábul, who when determined upon subverting the existing government, have only to excite a *jung* Shíah and Súní to effect their object. As soon as the contest is fairly commenced in the city, the rude hordes of Pughmán, Koh Daman and Kohistán flock to it, animated equally by zeal for what they believe the orthodox faith, and by thirst of plunder. Hostilities and confusion continue until the desired change in authority is produced, when Syuds and other worthies interpose and a temporary calm is restored. The Shías of Kábul aware of their constant exposure to conflict, and of the possibility of defeat, have endeavoured to provide for such a calamity, by securing for themselves an asylum—they have therefore turned their eyes upon Bísút, where the most wealthy of them have purchased castles and lands, and have in fact become joint proprietors of the soil with the Hazaurehs. Prior to the sway of Mír Yezdánbuksh they possessed a paramount superiority in Bísút, arising not from power of force, but from that of the influence which they possessed over the Mírs, divided in councils and feeble in talents, and who were glad to avail themselves of their mediation and support in their domestic quarrels and transactions with the Afghán authorities. Mír Yezdánbuksh, early made it apparent that he would allow no rival or controlling influence in Bísút, and even confiscated some estates of such Kábul Shías who had favored his opponents—and it became manifest to the remainder, that to enjoy their properties they must submit to conciliate the favour of the new chief. The general good understanding between the Kábul Shías and the Hazaurehs was not disturbed by these occurrences, the former indeed found that they could no longer dictate in Bísút, but alliances as before were contracted between the principal families of either, and the daily increasing power of the Bísút Mír, was an universal subject of triumph and exultation.

We now come to the period, when after the elevation and degradation of numerous Sháhzádehs, after a flagrant series of civil dissensions, cabals, intrigues, treacheries, perjuries, confiscations and assassinations, the inhabitants of Kábul, disgusted with the tyrannic and oppressive government of Shír Dil Khán, and his minister Khodá Nuzzar, entered into negociation with his brother Dost Mahomed Khán, then a fugitive in the Kohistán—and Shír Dil Khán unable to contend with the combination against him, abandoned the city and retired to Kandáhar. There was a prepossession, among the Shías of Kábul, in favor of Dost Mahomed Khán, on account of

his mother being a Kuzzulbash, no doubt they principally contributed to his accession to power, and on attaining it, he was assiduous in attention to them.

Dost Mahomed Khán, was an Afghán, he had gained Kábul, his first cares were to look around him and discover if there was any one near him likely or able to disturb him in its possession, and to destroy by any means the mistrusted person or persons. The state prison of the Sudú Zye princes had long been empty, the descendants of Ahmed Shah were dispersed in foreign climes, not one of them remained in Kábul that an enemy could erect into a monarch for the day—his brothers of Kandáhar and Peshawer, although hostile to him, were unable seriously to annoy him, being too much occupied in providing their own security, the first against Kanrán of Herát, the last against Ranjít Sing of Lahore—the Kháns of the Dúraní tribes had perished in the field, or under the hands of the executioner, and their families were in exile or destitute. But Dost Mahomed Khán was uneasy—he beheld amid the bleak hills and wilds of the Hazauras, a chieftain able in council and valiant in the field, extending his power in every direction, a power not ephemeral but promising to be durable, being raised by superior genius, and consolidated by good faith. He was aware that the Shíás of Kábul had been the instruments of his elevation, they might become those of his degradation. Already too powerful, they were irresistible if joined by Mír Yezdánbuksh. He saw his safety only in the destruction of that chief, which he in consequence planned. Profiting by the cordiality subsisting between himself and the Shíás, he represented to them that he held the character of Mír Yezdánbuksh in high esteem, and desired to establish a personal acquaintance with him, and he requested them to employ their influence to induce the chief to visit Kábul. They made communications to Mír Yezdánbuksh, and Dost Mahomed Khán forwarded to him a Korán with his seal affixed, as a solemn pledge for his safety, for which also the principals of the Shíás, at the Kábul chief's suggestion, became guarantees. Mír Yezdánbuksh, who had not hitherto come into collision with the Afgháns, and apprehending no hostility from one to whom he had given no cause for enmity, decided to visit Dost Mahomed Khán, calculating on making arrangements relative to Bísút, which might be mutually beneficial. One of his wives (a daughter of a Deh Zunghí chief) alone cautioned him not to repair to Kábul. This lady, of masculine understanding and habits, was accustomed, arrayed in male attire, well armed and mounted, to accompany her lord in his expeditions; she fought by his side in the field, and out

of it assisted him in his councils. It was usual with her, on every occasion, to recommend to the Mír, never to place himself in the power of the Afgháns. The Hazára Mír, on this occasion, listened not to her advice, and she unable to dissuade him from his purpose, evinced her fidelity by accompanying him, although her mind foreboded every disaster. The pair arrived at Kábul, were courteously received by Dost Mahomed Khán, but on the first favorable opportunity, Mír-Yezdánbuksh was seized and confined a prisoner, as was his wife. The Afghán chief would immediately have slain his captive, but the latter aware of Afghán cupidity, intimated his willingness to pay fifty thousand rupees for his ransom, provided he was released immediately, that he might repair to Kárzar and collect it—the Júanshirs of Kábul becoming bondsmen for its due payment. Dost Mahomed Khán, remarkably needy, without any design of sparing the Hazára chief, was nevertheless anxious, by some fraud or other to obtain his property, and therefore rescinded the orders for immediate execution, that he might concert measures for so doing. While these were in agitation, Mír Yezdánbuksh found means to escape, and reached Bísút. Exasperated at the escape of his intended victim, Dost Mahomed Khán, in the first transports of his rage, resolved to immolate his wife and ordered her to be brought before him, when he reviled her in approbrious terms. The Hazára Amazon exclaimed, "Oh! son of Poynder Khán, art thou not ashamed to array thyself against a female?" It is said, that the Afghán chief was abashed, and hung down his head. There were not wanting men of influence among the Afgháns, who, admiring the woman's magnanimity, deprecated any species of violence being offered to her; and Dost Mahomed Khán himself, perhaps recovering his reason, consented that she should be placed in custody of the Kuzzulbashas, who would treat her with more kindness than Afgháns. She was accordingly conveyed to Chandol, whence in a short time she also fled, attired as a male, and well armed and mounted, her escape probably favored or connived at by her gaolers. On her flight becoming known to Dost Mahomed Khán, he despatched a small party of horse in pursuit of her, and these came up with her in the valley of Honai, immediately before entering the Hazára territory. Finding herself overtaken, she turned about and presented her matchlock, and by alternately advancing, and halting, keeping her pursuers at bay; she gained the Kotul or pass of Honai, which being Hazára soil, pursuit was abandoned. The lady's good fortune was principally owing, of course, to the indecision of her pursuers, they had proceeded with sufficient alacrity

in chase, but on reaching the object of it, as men and soldiers, felt perplexed how to secure it, and ashamed to attack a female. The heroine joined her husband at Kázzar to his great satisfaction. She has since paid the debt of nature.

Mír Yezdánbuksh had no sooner regained his liberty, than he applied himself with unwearied assiduity to the extension of his power among the Hazáras. Although his sentiments towards the chief of Kábul could not be doubted, he refrained from manifesting any ill will towards the Afgháns, and kafilas passed to and fro from Kábul to Túrkiistán with the same security as before.

The collection of the Hazára mállá or tribute, Dost Mahomed Khán had confided to his brother Amír Mahomed Khán, the chief of Ghuzní, who, for this purpose, made annual incursions into Bísút. Mír Yezdánbuksh did not indeed assist him in the collection as before wont to do, but while punctually making over the portion immediately due from himself, left him to exercise his discretion and to do as well as he could with the several petty and refractory chieftains, nor did he join his camp until it was far advanced in the province, and then with so powerful a force as to defy treachery. The principal castle and residence of Mír Wullí Beg, father of Mír Yezdánbuksh, was at Kázzar, a valley watered by a fine rivulet leading from the base of the Kotul or Pass Ajíkhuk to Girdun Diwála and the valley of the Helmund. Mír Yezdánbuksh erected a new castle adjacent to, but on the opposite side of, the rivulet; the walls he intended to raise to the height of twenty-five pukhsas or about fifty feet, while their breadth was eleven pukhsas or about twenty-two feet, about fourteen pukhsas or twenty eight feet of the height had been effected in 1832. The castle was rectangular in common with other Hazára castles, but much larger than they generally are, and the entrance was defended by towers, after the mode in vogue at Kandáhar. The walls and towers were perforated with apertures for the insertion of matchlocks, which, although really weakening them, by their disposition and regularity contributed to embellishment. In this castle the Mír laid in large stores of lead and powder. Untenable against a regular force, and perhaps so even against an Afghán army, it might be considered impregnable in a war of Ulús or of the tribes. Its site was admirable, completely commanding the high road, which led immediately under its walls.

Mír Yezdánbuksh had united himself by marriage to the Hazára chiefs of Deh Zunghí and Sheik Ali, but among the latter tribe, there being some chiefs inimical to him, he marched against them,



and chastised them as well as the several petty tribes in the vicinity of Ghorbund.

Among the Afghán Kháns who had been serviceable to Dost Mahomed Khán in his designs upon Kábul, was Táji Mahomed Khán, Káker, or Háji Khán as commonly called; on more than one occasion he had preserved him from being blinded, if not put to death, by his brother Shír Dil Khán. Dost Mahomed Khán, on accession to power, in return for his services, bestowed upon him in jaghír, the district of Bamían with its dependencies for the support of himself and troops, limited to 350 cavalry. The Afghán influence, it may be noted, in the time of Sháh Zemán, extended to the Amú or Oxus; at that period, however, it was considerably lessened by the wary and able conduct of the celebrated Killich Ali Beg of Bulk, and pending the convulsions in Afghánistán subsequent to the blinding of Sháh Zemán, was lost altogether. On the death of Killich Ali Beg, Bulk became a dependency on Bokhara, his sons holding authority at Khúlm and Ibuk, as vassals to Mír Mahomed Morad Beg the chief of Kundúz, who seized the opportunity of extending his arms and influence, and became, what he now is, the most powerful Usbek prince south of the Amú—Bámíán with its contiguous districts of Gunduk and Agrabad to the north, Súrkh-dur and Jíú Toládi to the west, Kálú to the south, and Irak, and Shibr to the east.

North of Agrabad, now become the northern frontier of the Afgháns, and between it and the acknowledged limits of Kundúz, are many petty chieftains, Tájik and Tatar, who for many years have availed themselves of the disinclination of Mír Mahomed Morad Beg to provoke a war with the Afgháns, and of the inability of the latter to attack the chief of Kundúz, to maintain a kind of independence, asserting, if pressed by the Afgháns, that they pay tribute to the Usbeks, and if incommoded by the Usbeks, that they are tributaries to the Afgháns, while by annually small presents of horses to both parties, they preserve appearances with each, and their little estates from invasion. The principal of these are the Tájik chiefs Mahomed Ali Beg of Seghán, Ramtúláh Beg of Kahmerd, and Nusrulah Beg of Ajer, with the Tatar chiefs, Sirdar Syud Mahomed Khán, Shah Pessund, Ferhád &c. resident on the Dusht Sefed.

In order that the events subsequently to be related be more clearly comprehended, it is necessary to note that the first named of the Tájik chiefs, Mahomed Ali Beg of Seghán, was a man of considerable political dexterity and military enterprize. With no other legi-

timate resources than a scanty revenue derived from his small territory, and the *bádj* or duty levied from passing *kafilas*, he maintained four hundred horse, which he subsisted by forays upon the *Hazára* districts to the south and southwest of *Seghán*—carrying off men, women and children, whom he sold to the *Usbeks*. One year he had ventured to proceed to *Deh Zunghí*, and had exacted the payment of a years *mállia* or tribute. It was natural that he should become an object of dread and execration to the *Hazáras*, and he was, in fact, the *Nimrod* of these regions, •

“A mighty hunter, for his prey was man.”

So soon as *Hájí Khán* obtained the Government of *Bámián*,<sup>\*</sup> his attention, for several reasons, was directed to the extension of his influence in the direction of *Túrkistán*, and the possession of *Seghán* and *Kahmerd* he deemed essential to his designs—but as he was himself constrained to be present at *Kábul*, he was obliged to entrust his affairs in those quarters to his *Naibs* or deputies, whom *Mahomed Ali Beg* ever found means to amuse and to outwit, and the *Khán*’s projects towards the close at 1832, had no farther advanced towards maturity, than at the period of their conception. He was, or feigned to be, exceedingly incensed against *Mahomed Ali Beg*.

*Bámián*, being separated from the districts of *Kábul* by the whole breadth of *Bísut*, it is evident that *Mír Yezdánbuksh* had the power at any time to cut off all communication between the two places, and even to overrun the former, if hostilely inclined. *Hájí Khán* therefore at an early period sought to cultivate a good understanding with the *Hazára* Chief. The *Afghán Khán*, a profound master of dissimulation, had hitherto contrived in his public career, to pass himself off as a man of veracity and of fidelity to any cause he espoused—and although a few may have had penetration sufficient to question his integrity, it is certain that no public character in *Afghánistán* stood in so high or universal esteem.

Such favorable impressions of his character availed him in his attempt to attach the *Shías* of *Kábul* to his party, and in his overtures to *Mír Yezdánbuksh*. He taught the former to believe that in any religious contest, they would behold the most able of *Dost Mahomed Khán*’s *sirdars*, an ally under their banners, as in his public capacity, he looked to the equal protection of all classes of subjects, whether *Shías* or *Súnis*, and the preservation of order, without reference to matters of faith. He taught the latter to believe, that he might secure a friend, independent of any considerations as to *Dost Maho-*

med Khán, and pledged himself to frustrate any evil designs of that chief, even at the risk of being reputed in rebellion. The Shíás of Kábul reiterated to Mír Yezdánbuksh, the amicable sentiments of the Káker Khán, and he so far consented to a mutual good understanding, as to pledge, on his part, that he would hold Bámíán inviolate, and to allow two soldiers of the Khán to be stationed at certain castles in the line of road from Sir Chishmeh to Kálú, to provide for the wants and conveniences of the Khán's people, who might pass to and fro.

The Khán assigned Mír Yezdánbuksh an annual allowance of one hundred Khurwars of wheat, Mír Baz Ali fifty Khurwars of wheat, and chiefs of inferior note smaller allowances of grain, from the produce of Bámíán, sparing no means in his power to ingratiate himself into the good will of the Hazára chieftains.

In 1830. Hájí Khán, nominated as naib in Bámíán Raheimdut Khán his relative, and a man of business and personally brave. He had instructions to proceed to extremities with Mahomed Ali Beg—and in conformity thereto marched in the direction of Seghan. Just so much skirmishing followed, that one or two men were wounded on either side—when he also was gained over by Mahomed Ali Beg, and returned to Bámíán, reporting to the Khán at Kábul, as instructed by the Tájik chief, that it was necessary to secure Mahomed Ali Beg's friendship and to provide against the designs of Mír Yezdánbuksh. Raheimdut Khán had hitherto been friendly to the Mír, he now became an avowed enemy.

It had long been a favourite object with Mír Yezdánbuksh, and one universally cherished by the Hazáras, to exterminate the chief of Seghán, infamous from his frequent forays, and for vindicating the sale of captives on the plea of their being Shíás and infidels. In pursuance of his intended measures, Mír Yezdánbuksh had gained over to his interests the Tatar chiefs of the Dusht Seféd, which, of course, became known to Mahomed Ali Beg, who also, in some manner, had offended Mír Mahomed Morad Beg of Kundúz, and could not look to him for assistance—while he was at variance with his neighbour Ramtúlali Beg of Kahmerd. He saw himself on the eve of a contest with the Hazáras, to whom he had only his own feeble resources to oppose, and to rescue himself from impending destruction, he resolved, if possible, to court the Afgháns, and now that he had secured Raheimdut Khán in his interests, his offer of services and tender of submission were made with perfect sincerity, his only fear was that they would not be accepted by Hájí Khán.

Mír Yezdánbuksh on receiving intelligence of the arrangements made between Mahomed Alí Beg and Raheimdat Khán, did not doubt but that the latter acted in conformity with instructions from Kábúl, and convinced that any league, to which Mahomed Alí Beg was a party, must prove injurious to his interests, instantly resolved on decisive measures. He ejected the soldiers of Hájí Khán stationed in the castles of Bísút and with a considerable force marched into Kálú, the Hazára chief of which Mír Zuffer, joined his standard. Thence he proceeded into Irák, the inhabitants of which he put under heavy contributions. From Irák he marched into Shibr, and alike exacted large quantities of cattle, grain and roghun; his ally Mír Zuffer here also obtained 2,000 sheep. From Shibr the Hazára chief passed by Irák into the valley of Bámíán, where the several proprietors of castles either voluntarily repaired to his camp, or were intimidated into submission. The most powerful of these was Alladát Khán, Moghul, who occupied an ancient castle, now called Syudabád, adjacent to the ruinous citadel of Ghúlghúleh. This man had ever set the Governors of Bámíán at defiance, and now espoused the cause of Mír Yezdánbuksh with alacrity. The whole of the castles of Bámíán were obedient to the Mír, excepting the one in which the Governor for Hájí Khán resided, opposite the celebrated colossal statues. Therein he invested Raheimdat Khán, and imposed jirrim or fines, at pleasure on the individuals of the district obnoxious to him.

These events happened in 1839,—Bámíán appeared on the point of being lost to the Afgháns, and the chief of Kábúl became more than ever apprehensive of the ultimate designs of a powerful chief, who in attacking one of his provinces, made it manifest that he did not shrink from a contest with him. This year the Kábúl chief was also engaged in an expedition against Taghow to the north-east of Kábúl, which prevented him from giving immediate attention to the affairs of Bámíán and Bísút. Hájí Khán accompanied him, and had no difficulty in agreeing with his chief, that it was necessary in some mode or other to circumvent Mír Yezdánbuksh—a service which he proffered to perform.

As a remedy was necessary for the emergency of the moment, the dexterity of Hájí Khán, who was particularly interested for the safety of his jaghire, was put into play—his Shíá friends were put forward, and they induced Mír Yezdánbuksh to evacuate Bámíán,—by their means, he persuaded Mír Yezdánbuksh that Raheimdat Khán had acted without orders—to confirm which he appointed in his

place another governor for Bámíán—he also sent a Koran, by which he swore to forget what had past, and that he would not in any manner molest Mír Zuffer of Kálú, or any other of the Hazára and Tájík chieftains, his dependents, who had sided with Mír Yezdánbuksh, and he farther swore that he would personally exterminate Mahomed Alí Beg, or compel him to supplicate for mercy at the feet of the Hazáras.

In 1831, Amír Mahomed Khán, as usual, entered Bísút to collect mália, and Hájí Khán at the same period proceeded there, having obtained an order on Amír Mahomed Khán for rupees 6,000. This he readily obtained from Dost Mahomed Khán, urging, in advertence to his promises the preceding year of ensnaring Mír Yezdánbuksh, the propriety of adopting preliminary measures. His principal object was no doubt to examine the country; and while in it, he comported himself with unsparing liberality and indulgence to the Hazáras, and such manners and conduct so contrasted with the stern severity and even cruelty of Amír Mahomed, procured for him a very high character in the Hazáraját. Mír Yezdánbuksh, refused this season to attend the Afghán camp, and at the head of two thousand horse, marched as he said, to make pilgrimage to the Zearat (shrine) of Azáret Alí, at Bund Amír or Bund Berber, as generally called, seated a little north of Yek Auleng, and south-east not very distant from Séghán. Thither he went, but having settled his religious affairs, he applied his attention to his political ones, and marched to the valley of Séghán, where on two or three successive days he drew up his forces in order of battle, inviting Mahomed Alí Beg to a conflict, which the Tájík chief declining, he decamped and returned to Hazára.

In the early part of 1832, Hájí Khán stood a candidate for the collection of the Bísút mállia for the year. From the transactions which had occurred at Bámíán, it was clear that the province was in a precarious state of allegiance, and the Khán might reasonably enough represent, that it required no less authority than his own, to reduce it to order, and to teach the several Hazára and Tájík chiefs, that they were ryuts or subjects of Kábul, and not allies or partisans of Mír Yezdánbuksh. The destruction of that chief, being also undoubtedly a secret condition, Dost Mahomed Khán appointed Hájí Khán to the collection of the Bísút mállia, which was farmed to him for rupees 40,000; after the collection of which he was to proceed and settle the affairs of Bámíán. The Kábul chief engaged to furnish him with fifteen hundred horse, two guns and an elephant in addition to his own quota of troops.

Hájí Khán's whole attention was now directed to his preparations for the expedition into Bisút and Bámíán; he was assiduous in cultivating friendship with Mír Yezdánbuksh, and in inspiring him with confidence through the means principally of Khán Sherín Khán, the principal of the Júánshírs at Kábul; he succeeded, the Mír promising to act in cordial co-operation with him—the annihilation of Mahomed Ali Beg being ever a leading topic in the negotiations. Hájí Khán dispatched no less than seven kalam-múllas of oaths upon the Koran at various times, as solemn vouchers for the sincerity of his engagements.

In the month of Mohurru or June, an event happened at Kábul, which tended greatly to confirm Mír Yezdánbuksh and the Shías of Kábul in their good opinions of Hájí Khán. A very smart earthquake occurred, which about an hour after was followed by a conflict between the Shías and Súnís at the city, in consequence of some Atchukzye Afgháns, neighbours of the Júánshírs, interrupting the celebration, by the latter, of the commemoration of the death of the sons of Ali. Some lives were lost on the occasion, and on the intelligence reaching Hájí Khán, who at the time was confined to his couch, he dispatched the ever ready Korán to Khán Sherín Khán, and swore himself prepared to stand by the Shías. He probably expected that the conflict would become general, and that the rude tribes of the Kohistán would hasten to defend the orthodox faith, but aware that the Shías from their superior intelligence and union, were likely ultimately to prevail over their more barbarous opponents, he feigned to espouse their cause, as their triumph, or the convulsion that would follow, would involve the subversion of Dost Mahomed Khán's authority, which was exactly what he wished. It did not however happen so. The Shías indeed manned the walls and towers of their fortified residences for some days, and Dost Mahomed Khán became so alarmed as to fall sick in his palace—but the combat was not renewed, and a truce gained for negotiation, and Hájí Khán, now recovered from his disorder, was appointed Vakíl or Agent on part of the Afgháns, as the Nuwáb Jabar Khán was on part of the Júánshírs. The principal point to accommodate, was the compensation for the blood that had been shed—the loss of which was chiefly on the Afghán side; and Hájí Khán favoring the Júánshírs, matters were so contrived that the affair, without being arranged, was suffered to die away.

It is time to observe that between Hájí Khán and the chief of Kábul, a mutual distrust had for some time existed—the latter a man

of great ability is naturally suspicious, and Hájí Khán had become very influential and powerful. His jaghíre was originally fixed at Rs. 72,000 per annum, Bámíán being valued at Rs. 55,000 per annum, half the sayar, or transit duties, of Chhrríkar in the Kohistan at Rs. 10,000 per annum, Robát near the latter place, with villages at Sir Chishmeh and Loghur, completing the amount. The Khán derived from Bámíán, as he assured me Rs. 120,000 per annum, the half of the transit duties of Chhrríkar also much exceeded the sum fixed as did the revenues of all his villages—There can be little doubt but that at this time the Khán was in receipt of a lakh and half of rupees from his jaedad, valued at less than half the amount. The quota of troops he should entertain was limited to 350 horse; he had in pay above 700, and, with foot soldiers, he had certainly 1000 soldiers in his service. The Khán was of the Káker tribe of Afgháns, whose seats are in the hilly regions on the south-eastern confines of Afghánistán where they are neighbours of the Balúches. He was entirely a soldier of fortune, and his great fame drew numbers of his rude and destitute countrymen around him. These on their arrival at Kábul, in their ragged felts and uncouth attire were a spectacle to the inhabitants. The Khán always sent such men to Bámíán, where they were quartered upon the inhabitants, and progressively as he was able to provide, received clothes, arms and horses. To many he assigned lands, some formed villages, and, had his plans matured, Bámíán would have been colonized by Káker Afgháns. Such circumstances may have been sufficient to attract the attention of Dost Mahomed Khán, whose vigilance and penetration they were not likely to escape, but the whole political deportment of Hájí Khán, was calculated to excite mistrust of a chief in whose character jealousy is a principal ingredient. He had induced Dost Mahomed Khán to dispatch his brother Daoud Mahomed Khán on a mission to Lahore; it was whispered to Dost Mahomed Khán, that the envoy had rather furthered his brother's objects, than those of his mission—and whether he had or not, Dost Mahomed Khán's suspicions were excited. Hádjí Khán moreover maintained a regular correspondence with foreign princes as those of Belúchistan and Sind, while his intrigues and connections with the various Ghúnds or factions in Kábul were notorious, under whatever color he might represent them, or seek to excuse them to Dost Mahomed Khán.

In the summer of this year (1832) Díwán Atmar, the Hindú minister and confidant of Mír Mahomed Morad Beg of Kundúz arrived, on a mission at Kábul. The U'zbek chieftain sufficiently rude and

barbarous, is nevertheless the most able and energetic ruler in Túr-kistán, and is strongly suspected to regret that no opportunity presents itself to allow his interference in the affairs of Kábul. As it is he has no party there, and the Díwán's object was generally supposed to be for the purpose of forming one and making a political reconnoissance. His avowed purpose was to conclude a treaty offensive and defensive with Dost Mahomed Khán, and to unite by a family alliance the rulers of Kábul and Kundúz. Dost Mahomed Khán remarkably shrewd, politely declined any kind of treaty or alliance—and among his nobles who reprobated a connection with the U'z-béks, no one was so prominent as Háji Khán. Yet from subsequent events, there is every probability that the Khán formed an intimate connection himself with the Díwán, and while in the durbar he contended with so much vehemence against Mahomed Morad Beg, he privately, through the Díwán, pledged himself to advance his views in another and more effectual way.

Whatever may have passed was probably known to Dost Mahomed Khán, and he possibly repented having appointed Háji Khán to the collection of the Bísút mállia. To annul the appointment would have been ungracious and irritating, and therefore he contemplated to seize the Khán, in his estimation too powerful for a subject and become dangerous—and at once to remove all uneasiness and apprehension. But the Kábul chief could more readily conceive than execute so decisive a measure—and while his irresolution continued, his intentions became known, and that Háji Khán was selected for a victim became the current chit chat of the day. The chief's irresolution, the publicity of his design, and the new turn of ideas occasioned by the accounts about this time received of Shah Sújáh's projects, conduced to the safety of Háji Khán, and his chief unwillingly, but without help, allowed him to depart from Kábul; but to cripple him in his operations as much as possible, instead of 1500 cavalry originally arranged to have been furnished him, about 300 were commissioned for the service of Bísút.

Háji Khán had expended above Rs. 12,000 in the purchase of Kashmírian and British manufactured sháls, lúnghís, and dresses of descriptions to be distributed as khelats. He had originally intended to have left the city in the month of Suffer, as before noted, but he did not take his departure until the month of Rubbi-os-Sání when he encamped at Alíabad about a coss distant; here he halted some days and shifted his quarters to Killah Kází, where a second halt of some days occurred, thence he finally marched for Bísút by the



valley of Jellez and Sir Chishmeh. The motive assigned for these delays, was the prudence of allowing time for the Hazáras to collect their harvests, that there might be a certainty of provender for the horses of the Army. The real cause was the difficulty the Khán found to raise funds to enable him to put his troops in motion. The Khán was accompanied in his expedition by two of his wives, the most favored, a circumstance, by his admirers, imputed to his fearless spirit.

At Sir Chishmeh the Khán summoned Mír Yezdánbuksh to meet him on the frontier of Bísút, who returned for answer that he would first deliver over the tribute due immediately from himself, as a proof of his fidelity and good faith, and next wait upon the Khán. The Khán therefore crossed the Kotul Honai, and by short stages passing the plain of Yúrt, arrived at Girdun Diwalla in the valley of the Helmund. By this time Mír Yezdánbuksh had made over the tribute from Bísút dependent upon him, which in former years had given Amir Mahomed Khán so much trouble, and had taken so much time, to collect—and advanced to an interview with the Khán. This took place on the crest of a small eminence called the Kotul Girdun Díwál. The Hazára chief halted in line his force of 1500 cavalry, and advanced alone, Hájí Khán did the same, and in presence of the two forces, the Mír and Khán met and embraced each other. Mír Yezdánbuksh affirmed that he should consider the Khán's enemies as his own, whether Hazáras, U'zbeks or others, and asked only one favor that in the day of battle he might be placed in front. This meeting was succeeded by a renewal of oaths, and Hájí Khan affianced one of his infant sons to an infant daughter of Mír Yezdánbuksh. Nothing could be more auspicious than the commencement of this expedition, satisfaction and confidence were general, and the united Afghán and Hazára army moved along the banks of the Helmund; the Hazára chiefs vying with each other in delivering their tribute, in emulous imitation of their superior Mír, who attended at once to prevent any evasion, and to provide for the entertainment of his guest the Khán.

With the knowledge of subsequent events, it is impossible to decide what the real intentions of Hájí Khán were, on quitting Kábul; although it may be conjectured that he had determined if possible not to return there. He knew that he had become an object of suspicion to the Amír, and he knew that no Afghán spares even a supposed enemy, if he possess the power to destroy him. He may have considered it possible with the alliance of Mír Yezdánbuksh to have maintained himself independently at Bámíán, or if he preferred a

connection with the U'zbeks, he had paved the way for it, by his intercourse with Díwán Atmar. The possible appearance of Sháh Sájah in the field, if other chances failed, would give him an opportunity, in possession of Bámián and commanding the resources of Bísút, of rendering the Sháh an important service, and of enhancing his claims in the distribution of favour which would follow his re-accession to sovereignty. Like every Afghán however, he was essentially the child of circumstances, his grand object was to preserve himself, and if possible at the same time to signalize himself; but his ability, great as it was, like that of all Afgháns, while it sufficed to enable him to accommodate himself to and profit by circumstances, was not adequate to enable him to direct and command them.

Hájí Khán at this time had four brothers, one, Gúl Mahomed Khán, was resident at Toba in the Káker country; two, Daoud Mahomed Khán and Khán Mahomed Khán were in the service of Amír Mahomed Khán, at Ghuzní, and the fourth Dost Mahomed Khán was attached personally to Hájí Khán and accompanied him. The two brothers from Ghuzní, it was arranged should join his camp in Bísút with their followers, and, as a strong confirmation that he had little idea of returning to Kábul, he had invited Gúl Mahomed Khán to repair from Toba to Bámián, with as large a body of his countrymen as he might be able to raise. The three first named were all able and gallant leaders; Dost Mahomed Khán was less assuming.

Having conducted the Khán to the banks of the Helmund with his Hazára auxiliaries, from whence he wrote to me, the narrative may turn to the detail of our progress to join him, and of the incidents which afterwards fell out; we should note however, that after the first meeting with Mír Yezdánbuksh at Girdún Díwal, some two thousand Hazára infantry were dispatched to act in conjunction with the Khán's troops at Bámián, in the réduction of Seghán the country of Mahomed Alí Beg; and in justice perhaps to ourselves, it may be premised that at the time we were perfectly unacquainted with the Khán's political views and ideas, and proceeded to his camp with no other object than of examining under favorable circumstances the antiquities of Bámián.

*1st. March; 4th Jumadi Owul. Kabúl to Urgundi.* Being joined by Sirkerder Kumber, and his servant, our party of four persons, quitted the Balla Hissar by the gate called Derwázza Nagára Khánu, and proceeding through Chandol, skirted the banks of the Kábul river, crossing it by the bridge or Púl Nazir Khán, at the neck of the defile called by Baber, Deveren, an appellation now forgotten;

hence we passed into the luxuriant district of Chahar Déh, at the commencement of which is the village of Déh Müzzung. To our left was the tomb of Baber, with its fine garden and muzjít called Baber Padsháh, one of the holiday resorts of the people of Kábul; to the right at a greater distance, is the castle of the Afshars. For three or four miles from the city, the country is studded with castles, villages and gardens, cultivation is general, and the soil is abundantly supplied by canals of irrigation, their borders fringed with young willows and white poplars. At this season, the miswák fields had a splendid appearance, the plant being charged with its fine orange colored blossoms. At about six miles reached the ruinous castle called Killa Tóp Chíbashí having successively passed the villages Déh Mobaruk to the right and Ghow Khánu to the left of the road: hence three miles brought us to the parallel of Killa Kazi, seated a little to the left. About one mile and half north, were two or three detached eminences, one called Chell Tun from a Zearat on its summit—and there tradition fixes the site of the ancient city of Zábul. Killa Kazí, is the first stage Káfilas usually make on leaving Kábul in this direction, and is computed distant six ordinary cosses or nine miles. The road at this point becomes a little stony, and at some distance is reached the Chokí Urghundí, where is stationed a guard, a few paces beyond which a rivulet intersects the road, and to the north under the low hills about the two miles are described the castle and gardens of Sáfi' Khél. From the Chokí about a mile and half brought us to the village and castle of Urghundí, where we halted for the night. This march is very agreeable, the views afforded by a populous and highly cultivated country are very interesting, the road from Déh Müzzung to Killa Kazi bounds the district of Chahardéh to the north, full of castles, villages and gardens; on the other side of its course, the country is not so highly cultivated, and a bleak expanse separates it from the villages, castles and gardens of Sughmán and Békh Tút, at the skirts of a lofty hill range radiating from the true Caucasus, and on whose summit at certain points, snow is visible from the plains throughout the year. Dark dense masses and lines denote the verdure and gardens of Sughman. Urghundí is computed seven cosses, or between ten and eleven miles from Kábul; it comprises several castles with two or three villages or hamlets; its gardens produce grapes, apricots, and almonds. The soil is fertile and well watered, and a good deal of sháli or rice is cultivated. We had fixed our quarters at a musjít contiguous to one of the castles, intending there to have passed

the night, when the inhabitants of the castle entreated us to lodge within their walls, asserting they had enemies, who might assassinate us in the night for the purpose of throwing the opprobrium and consequences of the crime upon them; as this mode of effecting the disgrace and ruin of enemies is common among Afgháns, we complied and entered the castle.

*2nd March; 5th Jumadi Owul. Urghundi to Tirkhanu.* Started from Urghundí, and met a numerous cavalcade of men, children, camels, horses, asses, bullocks and flocks of sheep, which proved to be the Afghán pastoral tribe of Hassan Khél with their property, in progress from their summer residences in the Hazáraját, to the more genial districts of Sughmán. About a mile from Urghundí we followed a ravine which led to the base of the Pass called Kotul Hák Seféd (white earth.) The Pass was neither long nor difficult, and brought us on an extensive table space, in which we found an abandoned watch tower, and springs of water in two or three spots. The descent from this table space was gradual, and brought us into the beautiful valley of Zémunní, Jellaiz and Sir Chishmeh, speckled with castles, villages and gardens, through which flowed a fine stream of water, which, rising at Sir Chishmeh flows into the valley of Midán, and thence by the defile or Tunghí Lal-lunder into the plain of Chahardéh, where it unites with the river of Kábul. The road we followed traced the eastern side of the valley, and successively passing the Zearat of Khwejuh Esau distinguished by a grove of trees, and the villages Zóbudák and Zémunní, left of the stream, we arrived at a splendid grove of chunar or plane trees, with the village of Jellaiz immediately to the right of the road. Jellaiz has an ancient appearance, may contain some eighty houses, and has two or three Hindú dokándars or shopkeepers. It is said to be twelve jerríbí cosses from Kábul or twenty-seven and half miles. From Jellaiz, the valley has the name of Tirkhánu, at a castle in which, inhabited by Hazáras, we took up quarters for the night. This march was a very agreeable one, from the generally romantic and fine scenery. The villages and castles generally constructed of stones, had invariably their stock of winter provender piled upon the flat roofs of their houses; the various substances such as grass, clover, supust, &c. being arranged in distinct layers, recognizable by their various hues of brown, pale, or dark green. Among them were interposed layers of a vivid red color, which were found on enquiry, to be composed of the dried leaves of the rhubarb plant, collected by the peasants from the neighbouring hills, and made to

contribute to the sustenance of their cattle during winter. The operative cultivators of the soil, were invariably Hazáras. The villages are inhabited by mixed Afgháns and Tájíks. The district of Zébú-dák is entirely occupied by the Afghán tribe of Rústam Khel. Wheat grown throughout the valley is proverbially esteemed, and the lands watered by the river yield large quantities of sháli or rice. At this castle, in the evening, a terrible hubbub ensued, which we found occasioned by my man Yusef, who was a chillumkush so called, or tobacco smoker, he needed the chillum or apparatus for smoking, and maltreated the Hazáras for not producing what they had not. The Hazáras made common cause, and the Sirkerder and myself had not only difficulty to appease the tumult, but were ourselves very nearly ejected forcibly from the castle. The uncompromising chillumkush however triumphed, for a chillum was brought for him from a neighbouring castle. I have known very serious consequence to follow from the pertinacity of an Afghán chillumkush. In 1833, a large kafila from Kulát of Belúchistan in progress to Kábul, had arrived in safety to the country of the Terik Gulzyes south of Ghuzni. One belonging to it, a chillumkush, in advance of the rest, on reaching a castle, as a matter of course, asked for the chillum; refused, or not produced so speedily as he desired, he proceeded to violence, in which he was abetted by the stragglers of the kafila as they joined—but within the castle was the brother of the Terik Khán with hundred horse, and these mounted to resent the violence offered to its inmates. They assailed the kafila, two or three individuals were slain, others wounded, and the kafila escaped plunder by the payment of rupees 200, while but for the haste of the chillumkush, they would have quietly passed the castle.

*3d March; 6th Jumadí Owul. Tirkhánu to Kirghú.* Departed early in the morning, and crossing the stream, traced the western portion of the valley of Tirkhánu, which contains several castles and small hamlets. These have always, as indeed is general throughout Afghánistán, neat musjits without them, serving at once as places for devotion and for the accommodation of the stranger: numerous water mills were seated on the stream. Where Tirkhánu terminates, the stream flows through a narrow defile or tunglí, and the spot is romantic; on the rocks to the right is perched an ancient tower, the defile passed, we enter the valley called Sir Chishmeh, which in its expanse comprises many castles and hamlets. A spring at the north of the vale is considered the source of the river, whence the name applied to the district. In it, Hají Khán holds some lands

and a castle called Jói Toládí. At the head of the valley, where is seated a village on an eminence, we inclined to the west, having on our right a rivulet flowing in a deep ravine, and on our left high undulating grounds, among which were interspersed a few castles and some cultivation. The last of these castles with two contiguous ones, is the property of Ismail Khán, Merví, Mírákhúr or Master of Horse to Dost Mahomed Khán. About half a mile hence, the valley winds to the north, and leads into Honai at the commencement of which is the handsome castle of Mustapha Khán, son of Yúsef Khán Júánshír. A fine rivulet flows down Honai, ascending which, we reach two or three castles with contiguous hamlets, the latter being now called kishlaks, belonging to Zúlfukar Khán, a considerable land proprietor, also a merchant trafficking with Deh Zunghí. At this point the stream turns a water mill. Proceeding up the valley, which widens, the remains of walls and parapets are observed on the adjacent eminences, these might be supposed to represent old castles, but now that we are better acquainted with such ruins, we conjecture them to denote the burial places of the old inhabitants of the country. Clearing this extended space, the valley again contracts until we reach the base of the Pass or Kotul of Honai. A little while after leaving Sir Chishmeh, I was overtaken by an Afghán horseman, who informed me that he was sent by Sháh Abbas Khán, Mír Akhúr to Hájí Khán, to acquaint me that he was behind with three camels laden with provisions and articles of clothing which he was escorting to the camp, and he hoped that I would halt for him, that we might join the Khán together, who would be pleased with him for having paid me attention. I knew nothing of the Mír Akhúr, but on reaching a small patch of chummun or pasture, the Sirkerder and myself agreed to wait for him, and allowing our horses to graze, we threw ourselves on the ground until he reached. He did so in due time, when we mounted and pushed on, leaving the camels to follow at their leisure. On reaching the base of the Kotul, we found a party of Hazáras, endeavouring to procure kurridj or duty, from a small ass-káfila, carrying fruit and coarse calicos to the camp. The men of the Kafilá disputed payment on the plea of being camp followers and privileged persons—and the Hazáras were about to employ force to obtain what they asserted to be their due. Their party consisted of two very personable youths mounted, who called themselves Syuds, and five or six matchlockmen, on foot. The youths observed that on our account, they would not now use compulsion, but that their claims were just, they were satisfied with a few bunches

of grapes; and Shah Abbas cautioned them not to interfere with the Khán's camels in the rear. Commencing the ascent of the Kotul, we fell in with Mír Ali Khán, Hazára, and Naçir or steward to Mír Yezdánbuksh, proceeding on some business to Kábul. We gave him a few bunches of grapes procured from the Káfila, and he gave us a nishan or token, by employing which we might secure a courteous reception at a castle in Kirghú, where he recommended us to pass the night. The Kotul was not difficult, but consisted of alternate ascents and descents, and in the hollows were always small rivulets, fringed with margins of chummun. On the crest of the Kotul, which is a large table expanse, were the ruined walls of a small square enclosure, under which were sitting two or three Hazára chokídars or collectors of duty. They claimed duty from the ass-káfila and on being refused, threatened to chapow (plunder) it, but were satisfied with a few bunches of grapes and a small quantity of tobacco. We remained here until the camels joined, when we started from this spot the road divides into two branches, one to the right the high road to Bámian by Yúrt and Kárzar, the other leading to the front and which we followed. We had now entered upon a country indeed dreary and bleak, but abounding with rivulets, and in which every spot on its irregular surface at all capable was appropriated to cultivation; castles were occasionally seen in nooks or sheltered recesses of the hills at a distance from the road. We soon reached Kirghú, where we found three castles belonging to Mír Yezdánbuksh and his brother Mír Mahomed Sháh. We had intended to have halted at the farthest, in situation, of the three castles; but the people asserted their inability to provide us and our cattle with supplies. Notwithstanding the outrageous behaviour of Sháh Abbas, they were firm in refusing us accommodation, but advised us to proceed to a castle behind seated on a rise, belonging to Mír Mahomed Sháh, where although the Mír was at Kábul, the Mírzádehs his sons were present, and we should find every thing we needed. We accordingly went there, and the young Mírs accepted the nishán of the Naçir, and were polite enough to say, that without it they would have entertained our party on my account. A carpet was immediately spread without the castle, and a chillum produced. Here we found four Afghán horsemen who asserted they had a barát or written order for their entertainment that night, but refusing to show it, were denied reception. Much foul language was uttered by the Afgháns, and it growing nearly dark, two, the most violent, took up their arms and swords; they would obtain by force what was refused through civility.

The Hazáras took up stones, begging us to remain quietly in our seats, as we had nothing to do with the affair. Matters did not proceed to extremities, the Afgháns finding their menaces ineffectual were content to mount their horses, and seek lodging elsewhere, lavishing terms of abuse, and reviling Mír Yezdánbuksh as a sug or dog. A large flock of sheep now appeared in sight, which proved to be in charge of these men, on which the young Mírs called for their jeesáls or guns, and with four or five armed attendants hastened to protect their standing crops of wheat from being devoured. In the course of this day's march, we had met many large flocks of sheep, on their road to Kábul, being portions of the tribute of Bísút, made over to awáleh-dars, or persons holding awálehs or orders from Dost Mahomed Khán. To ourselves every attention was paid, and a sheep was set before us as peshkush, (a present,) which we would fain have declined, but it was pressed upon us, and a huge vessel of a composite metal, called chaudán, was provided, in which to cook it, with abundance of chelmer for fuel. Cakes were prepared of a mixture of múshúng or pea and barley flour. I was undoubtedly an object of curiosity, and even the female infants, beautiful in features, were brought to see what they had never seen before, a Feringhí; but the modesty of the Mirzádehs prevented them from asking me a single question. The night here was very cold, and in the morning the rivulet was slightly iced over. Kirghú is south of Kázar.

*4th March 7th Jumadi Owul. Kirghu to Bád Assiar.* Bade adieu to our hospitable friends at Kirghú, and at a little distance crossing a rivulet, made a slight ascent which brought us to the commencement of a fine level dusht or plain of large extent; at this point were a few castles, and we had a magnificent view of Koh Baba to the north-west. The road was excellent; at some distance to our right we had the river Helmund flowing in a deep valley, and between the river and the skirts of Koh Baba, was the district Ferai Kholm, abounding in castles and cultivated land, but without a tree. On either side of the road we were following, were also many castles and the soil was generally under cultivation—several vast heaps of stones occurred on the road side, and occasionally graves and burial places. We halted a while at a castle on this plain, that the camels might appear. I asked the old men, if Koh Baba was accessible, and was told that the summit might be reached in one day by persons who were "Níat Saf" or "pure in heart," but those who were not, might ramble many days or even be unable



to gain it. This mountain is remarkable for its abrupt, needle shaped pinnacles, and stands a singular spectacle from its contrast with the surrounding hills. Indeed the true Hindú Kosh has particularly rounded summits, and Koh Baba besides being a distinct hill is very possibly even of a different rock. Having traversed the plain, we had low hills to our left, while to our right was the Helmund, flowing beneath us through a space of chummun; its banks fringed with rose bushes and osiers. In so inviting a spot, we descended from the road, and refreshed ourselves awhile. Although the cold was so severe by night, the sun was powerful by day, so much so that while halting here, I was glad to sit in the shade of contiguous rocks. Hence a short distance brought us to Ghoweh Khól, (the deep glen); here were two castles on the opposite bank of the Helmund, over which a rustic bridge was thrown, the castles were also seated on the opposite sides of a ravine, down which from the north, a considerable rivulet flowed, and here joined the Helmund; this river also receives at Ghoweh Khol, the waters of another rivulet, Ab Dilawer (the high spirited water) so called from its never being ice bound. Ab Dilawer flows from the south-west. Our road probably led straight on along the banks of the Helmund, but for the convenience of our camels, we followed the valley down which flowed Ab Dilawer. It was of considerable length, and although without dwellings, there was much cultivated land in it. The rivulet rises at its upper extremity, and from its source a portion of its water is diverted into a channel or rural aqueduct, carried along the hills to the left throughout the whole extent of the valley. The aqueduct is supported by a parapet of stones, sufficiently regular in construction to produce a pleasing and picturesque appearance. At the head of the valley is a Kotul or Pass, the descent of which is considerable. Here a large rock with a cavity therein occurs, called Sung Súrakhí (the perforated rock, from which we believe; this Pass is called Kotul Sung Súrakhí. At the base of this Pass, we found as usual a rivulet and on the right a castle, where we halted until the camels came up. Hence passing over a succession of irregular but low ascents and descents we reached a castle at the opening of the extensive plain Bád Assiár, where we resolved to pass the night. Above us to the right at a trifling distance was another castle, and to the left on the opposite side of the valley, was a small kishlak, beyond which in a sheltered recess of the hills was a cheerful grove of trees, now rare objects, denoting a Zí-arat of Azaret Alí, or as called Azaret Sháh Mirdán. The Hazáras

of the castle at which we had halted, were unwilling to furnish us with supplies, alleging that the sursár they had contributed to the army, had exhausted their means. Sháh Abbas would not admit excuses, and was liberal in the discipline of the whip, and, but that I deprecated in strong terms, violence, I presume a curious scene of insolence on the one side, and resistance on the other would have followed. I wished to have proceeded to a castle a little lower down in the plain, where I learned Mír Alí Khán Kúrd, was fixed with thirty horsemen, but the Sirkerder did not appear consenting. I however insisted that nothing on my account should be taken from the Hazáras forcibly or even gratuitously, and flour was given to them, which they cheerfully engaged to prepare into bread. These people had now consented to furnish chaff and barley for the cattle, but wished to divide the charge of our entertainment with their neighbours in the castle and kishlak. These refused, those of the castle telling them to take charge of their own guests, adding, that if the whole party had originally taken up quarters with them, they would willingly have provided every thing needful. Contention now arose among the Hazáras themselves, stones were taken up, and Sháh Abbas and his companions were obliged to draw swords to terminate the strife. Night was now drawing on, and neither chaff nor barley was forthcoming. Sháh Abbas told me that the quarrel among the Hazáras had been a feint, to shuffle giving any thing, and that I had spoiled all his arrangements by forbidding violence, that with Hazáras, it was necessary to employ kicks and cuffs. Chaff was at last brought, but information given that the Rísh Sefed (white bearded old man) who had undertaken to provide barley, had ran away and secreted himself in the upper castle; on this, Sháh Abbas lost patience, and sent his companions armed to secure him. They went, and after some scuffling in which a few stones were thrown, by the Hazáras, they succeeded in bringing away the old gentleman, and another fellow, who had been prominent in opposing them. Sháh Abbas ordered them to be bound, and would have flogged both. I was enabled to save the old man from disgrace, but was compelled to abandon the younger one to his fate. The Hazáras now betook themselves to supplication, the old and young women of the castle assailed the Afgháns with cries of sorrow, and entreating to unbind the men. Barley was produced, and their prayers were granted. A sheep was also offered as peshkush, which Sháh Abbas disdainfully rejected, threatening the people of the castle with all the vengeance

of Hají Khán and Mír Yezdánbuksh, for their inhospitality. The bread prepared with our own flour was now brought, and with cheese also our own property we made our supper. Sháh Abbas and his companions had some Kábul baked cakes on which they regaled. The Hazáras however prepared for the party cakes of pea and barley flour, and brought them with large bowls of boiled milk : their hospitable offices were indignantly refused by Sháh Abbas, nor could all their entreaties, their expressions of contrition, and their kissing of hands and feet, induce him to partake of the provided fare. It was ridiculous enough to behold five hungry Afgháns refusing to satisfy their appetites, but the fact was, they were now employing stratagem. A sheep had been exhibited, and although in the first instance scornfully rejected, it was not intended that it should escape slaughter. On this account therefore they persisted in not accepting the cakes and milk, and laid themselves down to sleep, execrating the Hazáras as inhospitable infidels.

*5th March. 8th. Jumádí Owul. Bád Assiár to Afghán camp on the bank of the Helmund.* By times in the morning we made signals of motion, when the Hazáras of the castle besought us to partake of an entertainment first. The stratagem of the Afgháns had succeeded ; an entire sheep had been roasted during the night. Afghán delicacy was again amusing ; it was not until they had wearied the Hazáras, in supplication, weeping and kissing their feet, that they consented as a matter of especial favor, to sit down to a magnificent breakfast of a fine hot roasted sheep, bowls of moss or curds and warm bread cakes. I partook of the banquet, but on its conclusion enquired for the master of the sheep that had been slain, and presented him with its value in money, which he gratefully accepted, after which my nag being saddled, I mounted and departed receiving the benedictions of the people of the castle. Sirkorder Kumber remained until Sháh Abbas started, as the latter wished, and would otherwise have taken the money from the Hazáras. We crossed the northern extremity of the plain Bád Assiár, the soil of irregular surface, bleak and uncultivated, the castles with the appropriated soil lying at some distance to our left. On leaving the dusht we reached a spot of chummun, where with Sháh Abbas who had previously joined, we halted until the camels appeared. Sháh Abbas commenced digging up the roots of a small bulbous plant, which he said yielded Arun Tóta. This is a medicine of high price and of high repute for diseases of the eye. Its qualities are decidedly stimulant, and as it is

indiscriminately applied, its use must be in many cases improper. I afterwards found this medicine was one of the articles particularly enquired for by the people of the camp in the Hazárajat. It is sold in small pieces of a dark brown color, and would appear to be the inspissated juice of some pulbous plant, if Sháh Abbas was right, of some species of colchicum possibly. From this spot Sháh Abbas and his companion took the lead of us, and when we followed, we came to a point where the road divided into two branches, both passing over ascents; the road to our right was evidently the principal one, but it was as evident that Sháh Abbas had taken the other, the impression of his horses hoofs being visible; we therefore followed it although convinced we were in error, and fearful that our servants and camels might be bewildered. Passed a slight ascent, which brought us into a narrow valley of some length with a fine rivulet, which, at the mouth of the valley or just before it opens into another and larger, disappears suddenly. In the larger valley was a still more considerable rivulet, with a variety of springs, excellent chummun and patches of cultivated soil. Sháh Abbas was not to be found, and we rested here, determined to await the arrival of our servants. These at length arrived. We were in a dilemma, being conscious that we had lost the right road, and there was no castle in sight where we might obtain information. A flock of sheep came down the valley, but the shepherd so soon as he saw us, abandoned his charge and fled over the hills. The Sirkender mounted and pursued him, and although he did not overtake the fugitive, he ascertained, on gaining the heights, that a castle with a few trees was at some distance. Sháh Abbas and his companion had now joined. They had proceeded far down the valley but finding no person or habitation, had wandered in doubt. Sháh Abbas started for the castle discovered by the Sirkender; on his return, from the information obtained, our party moved down the valley a while, and then ascending the heights to our left, crossed over an undulating country, and gained a spacious valley in which were several castles, much cultivated land, and fine plots of chummun, with a fair rivulet flowing through it. Three or four brood mares, and two or three foals were grazing, indications of the prosperity of the inhabitants, and we found that the castles belonged to the Vakíl Shuffí and his Ulús. We were now directed into a well defined road which led us into an extensive plain, bounded to the right by low hills of a white porcelain clay, of which the few castles dispersed over the surface were

constructed, giving them a peculiar appearance. Two or three of these were in ruins, having been destroyed the preceding year by Amír Mahomed Khan. Traversing this plain, we passed through a burial ground, where on the right of the road was an immense grave from twenty to twenty-five yards in length. This, of course, was a Zearat, and, as every thing wonderful among the Hazáras, was ascribed to Azaret Sháh Mirdán. Sháh Abbas and his companion had again preceded us, and we came up with them lying before a castle, in which were only women, who, through fear, had fastened the entrance. We found that the Afgháns had endeavoured to break open the door with stones, under pretence of procuring a chillum and fire. Sirkerder Kumber succeeded by fair language to induce the women who stood on the ramparts of one of the towers, to lower down the indispensable chillum and fire. These women, on our enquiries as to the situation of the camp, in their anxiety to get rid of us or through ignorance, directed us wrongly, and we went on, until passing many successive and considerable elevations, we made a valley with two or three castles, whence, being made sensible of our error, we turned to our right, and, at no great distance, descried from the heights the Afghán camp on the banks of the Helmund, which we joined, it being still day.

My arrival was notified to the Khán, who immediately sent for me and the Sirkerder. He was profuse in expressions of satisfaction at seeing me, and said that when at Kábul, from the pressure of his affairs, he was prevented from shewing me the attentions he wished; now we should be constant companions. He added, if I wished to proceed directly to Bámíán, he would provide attendants, but he had rather I should postpone the visit for a few days, until the affairs of Bisút were arranged, when we should all go together. To this I assented; after being regaled with grapes and melons, now articles of luxury to us, we took leave. A quarter of a large tent, appropriated to the Sundúk Khánu establishment, was assigned for my quarters, and Sirkerder Kumber who shared it with me, was directed to attend to me in particular, as were generally all the peshkhidmuts or servants of the household. A second quarter of this tent was occupied by Akhúnd Iddytúláh and his son, the first tabíb or physician to the Khán, a venerable Rísh Seféd or white bearded old gentleman; the son, a stuturing youth, uttur bashí or apothecary. They had two or three enormous boxes, containing a various collection of sanative drugs and-simples. The other

half of the tent was occupied by the two Sundúkdars, persons in charge of the chests, two khiyáts or tailors, and Syud Abdúlah and his son, who called themselves the Khán's pirkhánus or spiritual guides. The old Syud was an ignorant and intolerant bigot, who agreed badly with Sirkender Kumber, who was not perhaps altogether orthodox in his opinions, and had no particular reverence for Syuds in general, and none for Syud Abdúlah. The latter therefore was wont to fulminate his curses and to revile the Sirkender as a Káfr or infidel, who in return charged the holy man with imposture. The young Syud was a meek inoffensive youth.

In the evening a peshkhidmut announced that the Khán invited me to sup with him in the tent of Mahomed Bágher Khán, where he was himself a guest. Thither I repaired, and was placed by the Khán by his side, which on all occasions after was my seat. Here I found most of the Gúlam khánu chiefs assembled. Our entertainment was composed of pillau and kórmeh or stewed meat, with sherbet or sugar and water. After the repast, the Khán observed to me, that all the persons present were sons of noblemen; the father of him, pointing to Mír Alí Khán Kurd, spent crores of rupees under the Sadúzye monarchs: "At that time tribute was received from Kashmír, Deyrah, Múltan and Sind, now we are all compelled to scour the Hazára hills in search of sheep and goats." Mahomed Bágher Khán, remarked, it was subject of congratulation, that amid the various vicissitudes that had passed, his (the Khan's) gúzeran (circumstances,) were prosperous. "The Khán exclaimed Shúkr! (thanks!) and added that he had a Sirdar who possessed insáf (equity.) He next panegyricized the Hazáras, professing to be delighted with their frank, unsuspecting manners and love of truth, affirming that he himself was both a Háji and ájiz (unassuming) who had come into Bísút, solely for the khidmut (service) of these good people, who had been maltreated by Amír Mahomed Khán. He expatiated on the large sums he had expended in kheluts, since his entrance into the country, observing that his liberalities had already excited umbrage at Kábul, where his enemies were numerous, and he had understood that the Sirdars should have said, "the Hazáras incapable of appreciating generous treatment would the following year refuse the payment of tribute altogether." He complained that the Sirdar had not forwarded him, as promised, supplies of flour from Ghuzní, and that instead of sending one thousand five hundred troops of the Gúlam Khánu, had only despatch-

ed a few above two hundred. He affirmed, that he had written to the Sirdar, that any disgrace generated by failure in the present expedition, would attach mainly to himself, that he was aware many persons in Kábul would exult and chuckle if Hájí suffered defeat. He then asserted his intention of reducing Séghan and Kahmerd, and vowed that until he had effected those objects, the water of Kábul was goslit khúk (swine flesh) to him, and if necessitated to pass the winter at Bámíán, he would do so, at the risk of being reputed bághí or rebellious. He dwelt on his many efforts to prevail upon Dost Mahomed Khán to aggrandize himself at the expense of his brothers at Kandahar and Peshawar, remarking that any one who had read the histories of Jenghiz Khán, Timúr Lung, Nádir Shah, or any other great man who had become Padshah, would see the necessity of disregarding family ties,—that it was by the slaughter of kinsmen, they had reached the summit of power, and he who would be like them fortunate, must be like them, cruel. He said that the preceding year at Jelalabad, he had exhorted Dost Mahomed Khán to advance upon Bajór and the Yusef-zye country, or, upon the Dehrahjât and Bunú. He moreover entered into an explanation of his motives in the negotiations between the Shíás and Súnis, which followed the affray in the month of Mohorrum—avowing unbounded liberality in religious sentiments, and insisting on the sacred duty of a chief to dispense justice equally to all classes of subjects, whether Shíás, Súnis, or even Guebres and Hindús. In this and similar conversation, the Khán who engrossed all talking, spent the evening, his auditors indeed every now and then, exclaiming, by way of admiration and approval, “Insabí Insabí,” or “Just, very just,” until growing late he rose, and the company broke up. He accompanied me to my tent, just behind his own, and although I did not need it, sent me bed clothing and furniture from his harazí serai.

*6th March; 9th Jumadi Owul. Bank of Helmund to Dival Khól.* This day a moderate march of four or five miles, passing two or three bolendís or rising grounds, brought us to a valley called Dival Khól or the wall glen, a name I could not discover for what reason conferred. In the course of the march, I was passed by Mír Alí Khán Kurd, who remarked to his party that the preceding evening, the Khán intended to have given me a postín, which I missed, by telling him I was already provided with one. This was the man, whose father, the Khán told me, had spent crores of rupees in his time,

and who himself was possessed of much property and at the head of thirty horse. Still to him it appeared wonderful why I had told the truth, when by a falsehood I might have gained a postin. The Khán alluding to the cold of Bísút, asked me in Mahomed Bágher Khán's tent, whether I was provided with a postin, no doubt intending to have given me one, 'bád I replied in the negative: I told him the truth, and the matter dropped. In this encampment we had the Helmund some distance to the north, and from it the plain ascended to the skirts of Koh Baba, and was studded with castles. In the evening supped with the Khán in the tent of his brother, Dost Mahomed Khán.

It may not be irrelevant to note here the forces accompanying the Khán, as well as other particulars relative to the affairs of the camp. The Khán's own troops at this time with him were about four hundred Kaker cavalry; the chiefs, Rahimdut Khán, the former governor of Bámian, Naib Sadúdin, Gúlam Akhúnd-zádeh, Pír Mahomed Khán, Abdúl Resúl Khán, Mirza U'zúr the Khán's Secretary, and the Khán's brother Dost Mahomed Khán. He had also, of his own retainers, about one hundred soldiers, thirty of whom were Hindústánís, who furnished his personal guard. The Gúlam Khánu troops were two hundred and twenty in number; their chiefs, Mahomed Bágher Khan and Mahomed Jaffer Khán, Moorad Khán, Mír Alí Khán Kurd, Hussein Khán, Chaous Bashí, and Gúlam Reza Khán Kika, Abdul Azzíz Khán Kálmuk, and Syud Mahomed Khán Beghmaní. Besides these were the following troops furnished by Dost Mahomed Khán; Shukur Khán, Terín, with fifty horse jeisalchís, and Jummer Khán, Yusef Zye, with twenty foot jeisalchís, the latter a guard for the guns, of which there were two, one of heavy and one of light calibre, with some twenty or twenty-five gunners; attached to the guns was an elephant. The whole forming a total of something above eight hundred fighting men. The Khán moreover had about thirty servants, who officiated as Sháhghassis, Nágirs, Peshkhidmuts, Chillumberdars, Sundúkdars &c., most of whom were really effective as soldiers, being all armed and mounted, and many of them were constantly employed on diplomatic and military business. He was also attended by six or seven youths his nephews, called Khánzadehs; each of these had two or three or four attendants, so that the number of effective troops may be calculated at nine hundred. A small number compared with the force which always accompanied Amír Mahomed Khán.



*The Hazára force consisted of about two thousand cavalry, under the orders of the Mírs Yezdánbuksh and Bazalí, and other chieftans of less note.*

Dependent on the Khán were five or six Hindú Munshís or secretaries, and two or three Shikarpúris; these formed his commissariate department. Attending the camp was a bazar which was tolerably supplied. I have before noted that the Khan's establishment comprised a physician, apothecary, syuds, tailors, &c.; it had also Sáwindahs or musicians; and accompanying him as friends or hangers on, were many other persons, a Syud from Mustang, in Belúchistán, some Hájís of Hindústan, Dín Mahomed a Júanshir merchant who came, hoping to recover some property plundered by the Déh Zunghí Hazáras the preceding year on his route from Herat to Kábul. His nephews were under the direction of Múlla Shahabudín, who boasted descent from Sheík Jam, and himself officiated as Kází, Múftí, &c. as occasion required.

Previous to marching the Khán communicated his orders to an old toothless jeisalchí, who acted as herald, and moved about the camp, shouting as well as his disabled organs of speech would allow "Khímeh páhin kún" or "strike tents." Upon this notice, horses were saddled, and the grooms loading their yabús (ponies) with their stable stores, were the first to move; they were followed by the camels more heavily laden, and when the ground was cleared of these, parties of horse at discretion marched. The Khán was generally the last to mount, bringing up the rear with a more or less considerable party. The Khán's march was announced by the beating of nakáras, which was repeated on his approach to any inhabited spot, as well as on his nearing the new encampment. It was usual to send in advance during the night the Peshkhánu or a tent with servants attached to the Haram Seraí and Karkhánu or kitchen establishment, that his wives on arrival at the ground might be forthwith accommodated, and that the food for the evening's meal might be in a state of preparation. His wives rode on the march in Kajáwas carried by horses, and attended by a slight escort moved with the heavy equipage. On reaching the fixed halting place, the Khán's grooms, under the direction of Naib Gúl Mahomed, Hazára, superintendent of the stables, described by long lines of rope an oblong square, to which the Khán's horses, as they arrived were picketed. Within the area of this square, were put up the tents of the Khan and his establishment, while other indivi-

duals, without it, selected spots at pleasure. The Gúlam khánu troops always encamped distinctly and together, as did the Hazáras. As soon as the yabús of the grooms were relieved of their loads, they were again mounted by their masters, who, in charge of Naib Gúl Mahomed, rode to the Hazára castles that might be near and laid hands on all the chaff and chelmer they met with, for the use of the forces. These men were the foraging party of the army. The camp being arranged, every one was occupied by his own immediate affairs until nimáz shám (evening prayers), which concluded, general shouts of "Dumm Bháwul Hák" thrice repeated resounded throughout the Afghán portion of it—imploping the protection of the holy Bháwul, the Pír, who is most revered by the Khán, and whose Zearat is in the citadel of Múltán.

At the conclusion of nimáz shám, which the Khán usually repeated in the tent of his nephews and Sheik or Mulla Shahabudín, he was wont to read a portion of the Koran, that as he expressed it "khazáneh shúwud," or that wealth might follow—after which he repaired to the tent where he received his evening mujlis, or party.

The mujlis consisted of three descriptions of persons; first, those whom the Khan invited, second such of his dependents who were privileged to attend, and lastly of such Afgháns and Hazáras, who voluntarily came. The Khán sat of course at the head of the tent, and his most honored guests immediately on his right and left hand. Two or three Sháhgházzís (master of ceremonies) were in attendance with their wands of office, to announce arrivals and to conduct visitors to the seats due to their rank. The company seated, at intervals, the Khán called for the kallahún, which would be passed to others of the party who were chillumkushes. In due time, supper would be ordered, which was invariably composed of the same fare. A few covered dishes of pillau or boiled rice and meat, with two or three búshkábs or plates of kormeh or stewed meat for the Khán and those adjacent to him, and bowls or basins of ab-gosht or meat and broth for the multitude at the lower end of the tent, and less entitled to distinction. The repast was followed by conversation, in which the Khán seldom left room for others to mingle. Occasionally individuals rose and took their leave, by making an obeisance and exclaiming "Salam Aleikum;" but the mujlis was only finally dissolved, by the rising of the Khán himself.

*7th march; 10th Jumadí Owul. Divál Khól to Shitána.*

This march was a moderate one of four or five miles, over the same description of black undulating surface. We halted in a barren uncultivated spot, but with castles adjacent. The name of this place was portentous, *Shitán* signifying "the devil."

On 11th and 12th we halted, owing to the necessity of negotiation with the chiefs of some districts in advance, who had been hitherto accustomed, when asked to pay tribute by the Afgháns, to offer according to an old, *Hazára* custom, "*Sung ya Búz*" or "a stone or a goat"—that is, they held a goat in one hand and a stone in the other, saying if the Afgháns are willing to accept the goat in place of a sheep we will give tribute, if unwilling, they shall have stones, or that they would resist. *Amír Mahomed Khán* had been obliged to accede to their conditions, from the advanced state of the season, when he approached these parts; but now the *Khán* insisted on receiving full tribute, which, owing to his personal reputation, his avowed determination to exterminate *Mahomed Alí Beg* of *Séghan*, and above all the powerful influence of *Mír Yezdánbuksh*, was delivered to him. As usual, I passed my evenings with the *Khán*, in the *mujlis* tent: there were generally some of the *Hazára* chiefs present, as well as many of the *Hazára* and *Tajik* proprietors of *Bámian* and its districts. The conversation naturally turned on the affairs of *Mahomed Alí Beg* of *Séghan*, and it always happened that twice or thrice in the course thereof, the *Khán* would raise his hands, in which he would be followed by the company, and repeat "*Fátiha*" swearing to exterminate the *Séghan* chief, which he finished by stroking down his beard, and exclaiming "*Allah Akber*" or "by the order of God." He particularly enquired if *Mahomed Alí Beg* had any wealth, but all answered nothing but a few horses and their equipage. Among the constant visitors at the *mujlis*, was a pert *Hájí* of *Hindústan*. This man had visited *Persia* and *Asia Minor*, and being particularly loquacious, would sometimes, uninvited, enter into a narration of the events which had occurred in those countries during his sojourn in them—and detail the circumstances of the wars between *Russia* and *Turkey* and *Persia*. He informed the *Khán* that *Russia* made war upon the *Súltan*, because he would not grant her Sovereign a "*kuláh*" or "hat"—as he had bestowed on other *Feringhí* potentates, but that the *Súltan* having been worsted, he had now been compelled to give his majesty the Autocrat of all the *Russias*, permission to wear a hat. Relative to the *Persian* war, he observed

that Abbas Mírza throughout the contest connived at the defeat of his own forces, being favorable to the Russians, whom he loved, as was believed in Persia, better than his own father.

At Shitána we had the Helmund to the north, and beyond it were the districts from which the Khán now received full tribute, in place of being satisfied with halt or "sung yà búz." They were called Darmírdighán or the land of heroes, literally, the land of men, one of whom is equal to ten. It being usual with the Hazáras if they wish to convey the impression that a man is valiant to call him "darmírd" or ten men, implying that he is equivalent to ten others of ordinary valour. The castles of Darmírdighán were visible from Shitána, distant some seven or eight miles. The soil of a dark red hue.

*8th march. Shitána to southern extremity of Sung Nishándeh.* This march was a trifling one of between two and three miles, in which we passed up the valley of Sung Nishándeh, of which Shitána was a portion. There were seven or eight castles, with some cultivated lands and chummun, with the never failing rivulet in this valley. The Sung Nishándeh which gives the name to the locality, was a large black stone perpendicularly inserted in a heap of small stones, and serves, or did serve, as a boundary mark. I omitted previously to notice that the two guns attached to the force, were dragged through Bisút by the Hazára peasants, who were collected by the officers of Mír Yezdánbuksh. About eighty of these poor fellows, were provided for the smaller, and two hundred for the larger gun. In most of the marches the direct line of road was not practicable in certain spots for artillery, there always occurring tunghis or narrow defiles, where wheeled carriages could not pass. To avoid these, the guns were dragged by circuitous routes along and over the brows of hills, and the operation was tedious and toilsome. The Hazáras who by compulsion were reduced to act the part of beasts of burthen, on arrival in camp were dismissed without receiving even a cake of bread, or the still less costly expression of thanks. It may be, they consoled themselves with the idea that the guns they were dragging, would one day be employed in effecting the destruction of Mahomed Alí Beg. The elephant with the force, accompanied the large gun, and was serviceable in preventing it from running back in the passages of the hills, by the powerful resistance he opposed with his trunk.

At our evening's mujlis at this halting place, we had among our Hazára visitors, Vakíl Shuffi, whose castles we passed in our sixth march. He was a fine, straight forward, ingenuous young man, and introduced to the Khán, a Syud, who might be serviceable to him, in his projects upon Búrjehgáhi and Déh Zunghí. The Khán appeared to be much delighted and spoke in highly flattering terms to the Vakíl Shuffi. He said that from the first interview he had with him, he was much prepossessed in his favour, and vowed that he would make such a man of him, that (using the expression used) "five men in the hills should stare again." With the Syud he was no less charmed or feigned to be so. This descendant of the prophet indulged in incessant citations from the Korán. The Khán was lost in ecstasy and surprize, that so accomplished and learned a personage should be found among the hills of the Hazáras. He promised to advance the Syud's temporal interests, who in return vowed to render obedient to him all the sturdy and turbulent men of the hills. The presence of the Syud, gave occasion to many fátihás, in all of which the destruction of Mahomed Alí Beg was sworn. When he took his leave with Vakíl Shuffi, the Khán observed that he had now found an "ajaib mirdem" (admirable man) and that his mind was completely set at rest. There were Afgháns in the camp, who had before seen the Syud, and they affirmed that his influence had been useful to the chiefs of Kandahar in their transactions with the Hazáras in their vicinity.

*9th march. Nishándeh to Shesh Búrjeh.* We this day made a more considerable march of fourteen or fifteen miles. The route across a bleak, elevated and irregular country, towards the conclusion, a long, and in spots, precipitous ascent brought us into a fair valley, which following and passing a few castles to the right and left, and a remarkable spot called the Azdha or Dragon, we halted on elevated ground beyond it, in the valley of Shesh Búrjeh, or the six towers, and contiguous to us were as many castles.

The Azdha of Bísút, is indeed a natural curiosity, which the creative imagination of the Hazáras, supposes to be the petrified remains of a dragon, slain by their champion Azaret Ali. Nor are they singular in the belief, for all classes of Mahomedans in these countries coincide with them, and revere the object as an eminent proof of the intrepidity of the son-in-law of Mahomed, and as a standing evidence of the truth of their faith. It is, geologically speaking, of volcanic formation, and a long projected mass of

rock about one hundred and seventy yards in length; the main body is in form the half of a cylinder of a white honey-combed friable stone; on its summit is an inferior projection, through the centre of which is a fissure of about two feet in depth and five or six inches in breadth, from which exhales a strong sulphureous odour, and a portion of the rock placed on fire proved to contain sulphur. This part of the rock is assumed to have been the mane of the monster. In the superior part of the projection which is supposed to represent the head of the dragon, there are numerous small springs on the eastern face, which trickle down in small lucid currents, having a remarkable effect from rippling over a surface of variously colored red, yellow, and white rock, and exhibiting a waxy appearance. The water of these springs is tepid and of a mixed saline and sulphureous flavour. They are supposed to exude from the Azdha's brains. On the back of what is called the head are a number of small cones, from the apices of which tepid springs bubble forth. These cones are of the same description of white friable porous stone, but singular from being as it were scaled over, and this character prevails over the greater portion of the Azdha. On one side of the head large cavities have been made, the powdery white earth there found, being carried away by visitors, extraordinary efficacy in various diseases being imputed to it. The vivid red rock which is found about the head is imagined to be tinged with the blood of the dragon. Beneath the numerous springs on the eastern face occur large quantities of an acrid chrystalline substance resembling sal-ammoniac, and I was told it occurs in some of the neighbouring hills in vast quantities; lead is also one of the products of the hills near this place. I brought away various specimens of the rock and dispatched them to some parties, but have not been favored with their classification. The spot was curious enough, and all I could do, ignorant of mineralogy, was to take a sketch of it, which while it may convey a correct idea of the outlines, fails to give the singular appearances caused by the lucid trickling streams over the many colored surface. I have also attempted to delineate one of the cones. I afterwards found that an analogous mass of rock, but of much more imposing size, occurs in the vicinity of Bámán, and is alike supposed to represent a petrified dragon.

Near the northwestern extremity of the dragon of Bisút, on high ground is a small building, a Zearut. Here are shewn impressions on

a mass of black rock said to denote the spot where Azaret Ali stood when with his arrows he destroyed the sleeping dragon, the impressions being those of the hoofs of his famed charger Duldul. At the entrance is also a stone with some other impression, and over the door is an inscription on black stone in Persian, informing us that the building was erected some one hundred and fifty years since. In various parts of Afghanistan are found impressions on rock certainly resembling the cavity which would be formed by the hoof of an animal, rather than any thing else; they as a matter of course, are referred to Duldul, and generally they might be supposed to have been artificially formed, although they have not an artificial appearance, and are in most instances smaller in size, than the hoofs of the animal they are conjectured to denote. Most of such impressions have Zearuts erected over them, but I have seen them in spots where they have not hitherto been so consecrated, and where they occur beyond doubt in the solid rock of the hill. They may conceal some curious and important geological facts, which I am unable to comprehend. The black rocks at Bísút are not those of the district, and must have been brought from some distance.

The valley in which we were now encamped is moreover remarkable for containing the sources of the river of Loghur, and these are also a curiosity of themselves. About a mile above the Azdha, the springs issue from a large verdant expanse of bog, not far from which the stream has a subterranean passage for about two hundred yards, when it re-appears in a small lake or cavity of about eighty yards in circumference. Here it turns two water mills and again disappears for about 500 yards, in which distance it passes under the Azdha, and issues east of it. Hence its course is unimpeded, and it flows a small but clear stream, through a verdant valley, and traversing the Hazará districts, crosses at Sheikabad the valley leading from Kábul to Ghuzni, then winding through Loghur a considerable stream, it flows to the south of Kábul into Shevukkí, and east of the city unites with the river of Kábul and Sir Chishmeh.

At this place the Khán sent for me privately by night, and entering into a long account of his early history and adventures, his services to Dost Mahomed Khán, and the return he met with from him, disclosed to me his views and intentions, of which I had been for some time suspicious.

We halted some days at Shesh Búrjeh, and were joined by a party

from Bámíán, composed of Mír Weiss, Tájik and confidential agent of Mahomed Ali Beg of Seghán; two or three Uzbek yakils of the chief of Shibeghán, bringing horses as presents to the Khán and Sirdar of Kábul. Mír Zuffér, the Hazára chief of Kálú, Mír Fyzi the Hazára chief of Foládi; these two subjects of the Khán, with Kurra Kúli Khán and two or three others in the Khán's employ. The last gave an account of the transactions which had taken place in the vale of Seghán; they reported that the Khán's troops in conjunction with the Hazára infantry, and a Tatar force from the Dusht Sefed, had possessed themselves of five castles belonging to Mahomed Ali Beg and his adherents, that the Hazáras originally stationed in the new conquests, had voluntarily given them over to the Tatars, who now refused admission to the Afgháns, asserting that they held them on behalf of Mír Morad Beg of Kundúz. They continued that the Hazára troops had returned to their homes, and strenuously insisted that they and their chief were acting treacherously towards the Khán.

I was present at the evening's mujlis, at which Mír Weiss had his first interview with the Khán; and conversation to the following effect took place. There was in company a large concourse of Hazára chiefs, all the new guests from Bámíán, Dost Mahomed Khán the Khán's brother, a Syud of Mustung in Belúchistán, Rahemdat Khán, the former Governor of Bámíán, with many others of less note. The Khán descanted on the uncompromising conduct of Mahomed Ali Beg, towards himself; affirmed that he had rejected all his overtures of friendship; that he had duped all his Naibs of Bámíán; that he had rendered himself infamous by his chapows (forays) for the purpose of carrying off slaves; that he had been audacious enough to kidnap five individuals from Shibr, immediate ryuts of his own, which the Hazáras virtually were, since they paid him tribute; that on account of Mahomed Ali Beg's contumacy, he had been compelled to defer the execution of his designs upon Deh Zunghí, Yek Auleng, and the Sheik Ali districts; that he had been necessitated to station three hundred troops in Bámíán, when every one of them was needed at Kábul; that this disposal of his troops had prevented him from giving assistance to that Martyr to Islam, Syud Ahmed Sháh, who fell waging war with the infidel Seiks. He contrasted his conduct with that of Mír Yezdánbuksh; enumerated the numerous important services the Mír had rendered and was rendering him; professed himself charmed with Mír Yez-



dánbuksh, and swore that he would reduce Mahomed Ali Beg to the condition of a ryut or annihilate him. Mír Weiss observed, that Mahomed Ali Beg was willing to become his ryut, or had the Khán resolved to annihilate him, it was an easy matter. The Khán continued, that he had no wish to annihilate, but it was necessary that the Seghán chief should become as truly attached to him as Mír Yezdánbuksh was; all the húshíárí he had hitherto displayed was on the side of falsehood, it now behoved him to veer to the side of truth. "Neither shall I be satisfied," says the Khán, assuming the buskin, "with the possession of Seghán, I must have Kahmerd also; until I have reduced both, the water of Kábul is ghost khúk (swine flesh) to me. Here" pointing to the Syud of Mustang, "is a Syud of Beloeche; shall I allow him to circulate in Beloeche, that I was battled by Mahomed Ali Beg; and here," taking me by the hand, "is a Feringhí, shall I allow him to tell his countrymen that Háji Khán marched from Kábul with a fine force of gallant cavalry, and guns, and elephants, and returned without striking a blow? Forbid it heaven!" Mír Weiss reiterated that if the Khán could forget the past, Mahomed Ali Beg was now actuated only by sincerity, in which sentiments he was supported by Raheimdat Khán and Kurra Kúlí Khán. The Khan, catching the eyes of the Hazára chiefs, asked Mír Weiss, what makes you carry off and sell the Hazáras, are they not Mussúlmáns, and Bundí Khodá? He replied that Mahomed Morad Beg was imperious in his demands for slaves; that grain, and not men, was the produce of Seghán, and that necessity led Mahomed Ali Beg to chapow the Hazáras. The Khán said, if Mahomed Morad Beg requires men from you, refer him to me; if dissatisfied with my representations, I will send him my own sons. The Khan asked Mír Weiss, if Mahomed Ali Beg would join his camp in Bísút, who positively answered that he would not, but if the Khán wished he would send a son. The Khán observed that this was a subterfuge, Mahomed Ali Beg was aware that his son would be exposed to no injury, on the contrary would be kindly treated; he knew that he, (the Khán) was a Mussúlmán, and how could he punish an innocent youth for his fathers crimes? Much conversation passed in which the Khán was amazingly liberal in his own praises; he endeavoured to persuade every one that he was a most pious Mussúlmán, that his gratitude to such as rendered him services, was unbounded, as was his liberality; and he instanced his having already expended above Rs. twelve thousand as presents

in Bísút. Whenever he alluded to Mahomed Ali Beg, he always expressed himself angrily, seeming to doubt his sincerity; at length Mír Weiss rose, and seized the hem of the Khán's garment, affirming that he looked up to no other person, and conjuring him to suppose Mahomed Ali Beg in the same condition. The Khán applauded the action, and asked Mír Weiss, if Mahomed Ali Beg should hereafter turn to his old trick of deceit, whether he would abandon him, and adhere to himself. Mír Weiss said he would, on which the Khán immediately raised his hands and repeated *Yátiha*, being joined as usual by the company.

At Azdha, also, arrived in camp, Múlla Jáhán Mahomed, bearer of letters and presents for the Khán and Sirdar of Kábul from Mír Rústam, the chief of Khyrpúr in upper Sind. This man had formerly been in the Khán's service, and his Governor at Bámían, but intriguing with the Hazára chiefs, the Khán had seized him, confiscated his effects—and after shaving his beard, and subjecting him to a variety of ignominious treatment, set him at liberty, when he went to Sind, and found service with Mír Rústam. Whatever the object of his mission might have been, it afforded the Khán an opportunity of vaunting to the Hazáras, that the following year he would lead an army of a hundred thousand Mussulmans against the Seik infidels. Múlla Jáhán Mahomed brought as presents, two Sindí muskets, one mounted in silver, the other in gold, cut glass kaliyún bottoms—shawls, mixed silk and cotton of Sind fabric, British muslins, calicos, &c. with three running or marai camels.

The Múlla in his route from Khyrpúr, had passed by Tobá, in the Káker country, and brought intelligence to the Khán of the decease of his brother Gúl Mahomed Khán, a rude but gallant soldier. This naturally affected the Khán, and more particularly so at this crisis, when he had expected his arrival at Bámían in co-operation with the designs he entertained.

While at Azdha, two or three slight falls of snow occurred, on which occasions the Khán summoned his Sázingas or musicians, which gave rise, among the troops, to a contrast of his conduct with that of Amír Mahomed Khán, who on the first appearance of snow, hastily decamped for Kábul, even though the whole of the tribute had not been collected. We had also for two or three days violent wind storms, which the Hazáras, skillful prognosticators of the weather, with the falls of snow ascribed to a Tokul, and affirmed they would be succeeded by fine settled weather. My horse however was

nearly destroyed, and having before been provided, with a better one for riding by the Khán, I dispatched it to Kábul from this place with Yusef, who also complained of the cold.

*10th march; Shesh Búrjeh to Ghírú Myní.* This day's march was a long one of sixteen to eighteen miles and conducted us to the frontiers of Jírgáhi and Búrjahí. On leaving the valley of Shesh Búrjeh a little north of the Azdha, we passed amid low elevations covered with a deep red soil, and gained a narrow valley, down which flowed a rivulet; and to our left were two or three castles: this valley terminated in a narrow defile, which cleared, we entered upon a more level country and the road was good and well defined. Arrived at the Ziarat of Tatar Wullí, whom the Hazáras represent as having been brother to Baba Wullí whose Ziarat is at Kandahar. This Ziarat resembles in form and appearance that of Azerat Sháh Mirdan at Azdha, and adjacent to it are two kishlaks or villages. Hence, a long distance, passing a castle or two on our right, brought us to the valley of Ghírú Myní where we halted. Here were three or four castles, deserted by the inhabitants, who had also broken or hidden the grinding stones of their Asiahs or water mills, of which there were six or seven seated on various parts of the rivulet which watered the valley. Many of the soldiers at this place, availing themselves of the castles and Kishlaks being deserted by the inhabitants, had made free with the wood employed in their construction. The Khán observing this, paraded his camp, and with a large stick personally chastised those he detected with the wood in their possession.

At this place we made a halt of some days; for two or three the Khan was indisposed, and his disorder at one time was so serious, that he became insensible. The chiefs of Jírgáhi and Búrjehgáhi, after some negotiation, consented to pay tribute, influenced a little by the approach of the Khán, but more by the interposition of Mír Yezdánbuksh. The former district gave tribute to the amount of Rs. three thousand, the latter to the value of Rs. seven thousand. The Khán originally insisted upon the delivery of two years tribute, but the advanced state of the season, with his own anxiety to direct his attention to the affairs of Seghán and Kahmerd, operated in favour of these Hazáras. Their chiefs after the delivery of their tribute, joined the camp and received the Khelats. The Khán, profuse in the distribution of presents, had long since exhausted the stock he brought from Kábul, of sháls, lúnghís, chupuns, &c. and

it was now amusing enough to see his servants, by his orders, despoiling the heads of the Khánzadehs' his nephews, and others of his troops, to bestow them upon the Hazáras. Even this resource at last failed and the peshkhidmuts were reduced to the expedient of purchasing a Khelat from one who had received it, that they might re-deliver it to the Khán to confer upon another. Snow again fell here, but not in such quantity to remain on the ground. Ghírú Myní, was the limit of our expedition from which Karábagh of Ghuzní, was represented to me as lying S. 20° E. three marches distant. The district of Jírgahí was due west of it, and Búrjeh-gahí north-west; the southern extremity of Deh Zunghí was pointed out as being about fifteen miles distant, its direction a little north of west.

*11th march. Ghírú Myní to Wújáhí.* This day we retrograded and made a very long march of perhaps twenty-two to twenty-four miles. We followed nearly the same road, by which we had advanced from Shesh Búrjeh, repassing the Zearat Tatar Wullí, and crossing the valley of Shesh Búrjeh at a point more northerly than the Azdha, which although at no great distance, was not visible. At that spot we were compelled to be cautious in selecting our road, for the soil although verdant and covered with grass, was boggy. The Hazáras told us that some years since a gun belonging to the Afgháns, had been swallowed up in it. From this valley, a slight ascent passed, we entered into another where were three castles, one called Killa Kásim; hence after traversing a bleak wild country we finally reached Wújáhí where we halted. Here were two or three castles with a fine rivulet of water.

*12th march; Wújáhí to Ghoweh Khól.* This march was the longest we had made. On starting, crossed the rivulet of Wújáhí, and traversing a high ground, had other two or three castles to our left. A long course over a wild dreary country brought us into the southern and most populous part of the plain Bád Assia, a term which signifies windmill, but I looked in vain for such an object. In this plain were numerous castles and kishlaks, many of the houses displayed gumbúzes or domes, and many of the towers of the castles were also covered with them, imparting a novel and picturesque appearance. The cultivated land was of considerable extent. At the north-eastern extremity of the plain, we crossed a very deep ravine with a powerful rivulet flowing through it, after which we passed the castle, at which we remained a night

when proceeding to join the Khán's camp as noted in the 4th march, and where Shah Abbas so signalized himself. I was in advance, riding with some of the Khán's Hindus and was not recognized by the inmates, but Sirkarder Kumber who was behind, was on coming up taken into the castle and regaled with milk. From this spot we passed the Kotul Sung Súrakhí, and descended the valley of Ab Dilawer, both before described, and crossed the Helmund at Ghoweh Khól, halting on the high grounds beyond it, and near a castle, the proprietor of which although a relative of Mír Yezdánbuksh, had thought prudent to fly, having on some occasion been imprudent enough to say he would stay the Mír if opportunity occurred. Above us to the north was another castle and two kishlaks. A little to the east was a deep ravine through which flowed the stream, which I have before noticed as joining the Helmund at this spot. The cold here was severe, and a rigorous frost predominated. The stream was not ice bound, but its banks and the contiguous shrubs were clad with vast icicles. Our ground of encampment was also free from snow, but it lay heavily on the hills we had to cross in the next march.

As this march closed our expedition in Bísút, Mír Yezdánbuksh, had by previous orders, collected at Ghoweh Khól, large stores of provisions, which he presented to the Khán. About to leave the province, it may be in place to note briefly the results of the Khán's bloodless campaign. The revenue of Bísút, farmed by the Khán at its accustomed valuation of Rs. 40,000, had been raised to Rs. 60, 000, the increase owing to the receipt of full tribute from some districts formerly wont to pay but half, or sung ya búz, and to the receipt of tribute full also from Jirgáhi and Búr-jehgáhi which before had paid no tribute at all. By the cordial co-operation of Mír Yezdánbuksh, the collection had been made with facility and promptitude, without the necessity of firing a musket. The Hazára chiefs were full of confidence in the good faith of the Khán, and even two or three leaders of Deh Zunghí had visited his camp at Ghírú Myní, and promised the next year to lead him into their country. Nothing but the untoward state of the season, as Mír Yezdánbuksh observed, prevented this year the collection of tribute from Deh Zunghí and Yek Auleng. During preceding years, when Amír Mahomed Khán, the Sirdar of Kábúl's brother, collected the revenue of Bísút, and when unassisted by the influence of Mír Yezdánbuksh, he was left to pursue his own harsh and uncompromis-

ing measures, he was always compelled to leave a portion of it behind; and of the portion collected, much was lost, by the Hazáras chapowing the flocks in their passage to Kábul and Ghuzní. To the European, accustomed to transactions of consequence, the advantage of sending a large force on an expedition of two or three months, for so small a sum as Rs. 40,000, or about £ 4000, may appear very equivocal, but in these countries of poverty and bad management, even such a sum is deemed of importance. It serves also to appease the clamors of some of the hungry soldiery, and to furnish employment for others in the collection. The superior officer, and, indeed all the troops employed find a benefit in it, as their cattle are supplied gratis with chaff and themselves with fuel and sometimes food, which they would be obliged to purchase, if stationary at Kábul. It is the custom at every new encampment to furnish one day's provisions for the troops, collected from the inhabitants of the district. This indeed is chiefly profitable, to the superior chief who receives it, and if he distributes it among his followers, he charges it to their accounts. The chief likewise receives a great number of horses as peshkush, for no Hazára chief comes before him empty-handed; in the same manner he receives great numbers of carpets, nummuds or felts, and barruks or pieces of coarse woollen fabric; all of which he turns to profit, valuing them as money if made over to his troops, as well as being enabled to display a costless liberality. The provisions received with the peshkush offerings, must all therefore be estimated as so much value received from the Hazáras, and included in the amount of tribute. The Khán had collected as tribute Rs. 60,000; under the heads just noted he had received probably more than half that amount, from which deducting the Rs. 40,000 made over to the awaledars and Rs. 10,000 the value of the presents disbursed, we may safely calculate that the Khán had netted a profit of Rs. 30,000, it being noted, that agreeably to the Sherikí or partnership relation in which the Khán considers himself with the Sirdar of Kábul, he did not make over to him the excess in tribute collected.

With regard to the political situation of Bísút, it was evident, that the Khán, had he been zealous in devotion to Dost Mahomed Khán, had rendered that Sirdar an important service, having placed the province, by his artful management, in a state of dependence it had never before acknowledged. The revenue was augmented by one half and the next year he might collect tribute from Deh Zunghí and Yek

Auleng, as probably from the Sheik Ali districts, the chiefs of which, it were absurd to suppose, could resist the united forces of the Khán and Mír Yezdánbuksh. It was fair to compute that the revenue of the Hazára districts near Kábul might be raised to one lakh and a half of Rs. without including the incidental advantages, so considerable, as has been previously demonstrated. It was also pleasing to reflect that these advantages might be gained without bloodshed, viewing the high character the Khán seemed to have established among the Hazáras, and the apparently sincere attachment of Mír Yezdánbuksh to his interests. But knowing, as I did, the Khán's secret intentions, I was not sanguine enough to imagine that these gratifying anticipations would be verified. It was probable indeed that Mír Yezdánbuksh guided by his personal enmity to Dost Mahomed Khán, and influenced by his confidence in the Khán, would espouse his cause, and the large force he could bring into the field with the Khán's Káker horse, were sufficient to create much uneasiness to Dost Mahomed Khán, surrounded, as he is, by enemies. It was reasonable to suppose that the Khán and Mír united, might be enabled effectually to resist the efforts of Dost Mahomed Khan, even if he put forth his strength, while if discomfited, the Shías of Kábul, who could not separate their interests from those of Mír Yezdánbuksh, and who considered the Khán as their friend, were always at hand to interpose and negotiate a reconciliation. Mír Yezdánbuksh, we may note, was a man of about 40 years of age, of tall athletic form, with a remarkably long neck, his complexion was ruddy and his features prominent, of the genuine Hazára cast, but without pleasing; he had scarcely any beard or rather a few straggling hairs in place of one. When in company he had always his tusbíh or string of beads, in his hand, which he passed between his fingers, ejaculating lowly to himself, and turning his head continually from one side to the other, with his eyes averted upwards, like a person abstracted in thought, or even like one insane. He usually sat bare-headed, alleging that his head was hot, and that he could bear no pressure upon it. On the line of march, were the cold ever so intense, he always rode with a simple cap, without other covering, and only on extraordinary occasions did he put on a turban of white muslín. His garments were plain and unaffected, his vest of barruk of Deh Zungbí, with two stripes of gold lace down the front. A lúngbí was his kummerbund, in which was inserted a Hazára knife. He seldom took part in general conversation, and indeed seldom spoke at all,

unless immediately addressed, when his answers and remarks were brief and pertinent. His appearance and manners were certainly singular, but would nevertheless induce the observer to credit his being an extraordinary man, which he undoubtedly was.

At Ghoweh Khól we halted two days.

*13th march; Ghoweh Khól to Kálú.* This day's march in the direction of Bámíán, was a very long one. Traversing the table space on the extremity of which we had encamped, and passing a castle and two or three kishlaks, we entered the ravine down which flowed the rivulet before mentioned, and followed its course nearly north-east; our road led over rocks of dark primitive slate, and, although the course of the rivulet was sometimes very narrow, was not upon the whole difficult to cavalry, although impracticable to wheel carriages. We eventually reached the base of the Kotul Síáh Rígh, or the pass of black sand. The ascent would not probably be very difficult or even very long at any other time, but now was troublesome from the frozen snow, which caused many of our animals, particularly the laden ones to slip and lose their footing. On gaining the summit of the pass, which was strewn with huge fragments of rock, we had a splendid view of the hilly regions around us; below us were the few castles of the district called Síáh Sung, to gain which a long and precipitous descent was to be made. To our left we had very near the craggy pinnacles of Koh Baba, seen to advantage from the plains to the south. I dismounted and sat awhile on the rocks, when the Khán arrived, who also dismounted, and took a survey of the country around with his durbín or spy glass. We were joined by Mír Yezdánbuksh, who pointed out the position of Ghorbund and other places. The idols of Bámíán were not hence visible. The Mír obtained permission to visit his castle of Kárzar not far distant to the right, and left us at this spot. The descent of this pass was so difficult, that most of us thought fit to lead our horses. On reaching Síáh Sung we took a westerly direction and crossed two successive and long passes with rounded summits, the country covered with snow; descended into a valley which led us into the vale of Kálú, through which, passing many castles and kishlaks, we proceeded to the western extremity and encamped near the castles occupied by the chief Mír Zuffer and his relatives. The spot itself was free from snow, but it was on the low hills behind us to the south, as well as on the loftier ones to the north. We here observed the scanty crops of wheat at the skirts of the hills bounding



the vale, still green and immersed in snow. The principal crops had indeed been reaped, but heaps of the untrodden sheafs were lying on the plain, some of them covered with snow. Kálú is one of the principal districts dependent on Bámíán and contains some twenty castles and a few kishlaks. Its chief Mír Zuffer, Hazára, had a family connection with Mír Yezdánbuksh. He had joined the Khán's camp in Bísút, and now provided an abundance of provisions. The Mír was about fifty years of age, tall, stout, and of respectable appearance. Of manners frank, and in conversation plain and sensible.

*14th march; Kálú to Tópchí.* From Kálú passing south of the castle of Mír Zuffer, called Killa Nó (the new castle) built on an eminence, with some ruins of burned bricks on the summit of a hill to the left, we proceeded to the base of the pass or Kotul Huft Pylán. The commencement of the ascent was somewhat steep, but the road large and unencumbered with rock or stone; this surmounted, the road winds round the brows of elevations and then stretches over a gradually ascending plain until we reach the crest of the pass. Hence we had a magnificent view of mountain scenery. The hills of Bámíán and vicinity were splendid from the bright red soil with which many are covered, interspersed with sections of white and green. The mountains of Turkistan, in the distance presented a beautiful and boundless maze. The valley of Bámíán was displayed, and the niches in the hills which contain its idols visible. The descent of the Kotul, although of great length, was perfectly easy, and the road excellent throughout: it led us into the northern extremity of the vale of Tópchí—where we found a rivulet fringed with numerous mountain willows, a spot revered as a zearat of Azaret Alí, and above which was an ancient tower perched on a rock. A little below we encamped, and near to us were five or six castles of a red colour, which distinguishes the soil and most of the hills of the vale. In those to the west were some inhabited caves or samuches. Up the durrah or defile leading from Tópchí is a road which avoids entirely the Kotul of Huft Pylán, and leads to its base. Some of our cattle followed this road. The inhabitants of the place provided the Khán with supplies.

*15th march; Tópchí to Bámíán.* Proceeding down the valley of Tópchí for above two miles entered the valley of Bámíán at a spot called Ahinghur or the iron foundry. The rivu-

lets of Tópchi here also fell into the river of Bámíán; its course had been latterly fringed with zirishk or barberry bushes, mixed with a few ghuz or ley shrubs. Towards the close of the valley, on the hills to the east were some ancient ruins. At Ahinghur were two castles with kishlaks, and hills to the north had a few inaccessible caves. From Ahinghur proceeded westerly up the valley of Bámí-an skirting the low hills to the north, the river flowing in a deep bed in a more or less extensive plain beneath us to the left. The hills soon began to be perforated with caves, which increased in number as we advanced. Passing the castle of Amír Mahomed Tá-jík to our right, we arrived opposite the ruinous citadel of Ghúlghúleh, where in the hills near to it on the opposite side of the valley, were great numbers of caves. A short distance brought us to Bámíán where we encamped opposite the colossal idols. The troops this day marched in line with banners displayed. The Khán preceding with his Káker horse, being followed by the feebler line of the Gú-lám Khán. Amid the beating of nákáras he entered Bámíán, and received the congratulations and welcome of his ryuts. Our guns had been left in Bísút to be dragged through by the Hazáras.

We found a strange state of things at Bámíán; the winter had set in prematurely, and the sheafs of grain were lying untrodden under snow. The oldest inhabitants did not remember such an occurrence.

We halted here several days, and a vast quantity of provisions and provender was collected from the inhabitants of Bámíán and dependent districts. The Hazára troops had now become guests of the Khán, and received rations in the same manner as his own troops. On our arrival here, Mír Weiss, the agent of Mahomed Alí Beg, accompanied by Múlla Shahabudín on part of the Khán, set off for Séghan. Mír Yezdánbuksh rejoined the Afghán camp, and the Hazára auxiliary force was augmented by the arrival of four hundred horse from Deh Zunghí, commanded by two young chiefs, related to Mír Yezdánbuksh. In the course of a few days, Mír Weiss and Múlla Shahabudín arrived in camp, bringing with them Mahomed Hussan, a son of Mahomed Alí Beg, and five or six horses as peshkush. Mahomed Hussan was a very handsome youth of about sixteen years of age, and was received with much kindness by the Khán, who seated him on his knee. Mahomed Alí Beg had entirely gained over Múlla Shahabudín, by presenting him with a chupun of scarlet broad cloth, two horses, and

as was said, a few tillas (gold coin) of Bokhara. And the Múlla had concluded a treaty, by which the Séghán chief acknowledged himself a tributary to the Khán, and consented to give him his daughter in marriage. These arrangements, however consonant with the Khán's ideas and views, were, by no means agreeable to the Hazáras, the destruction of Mahomed Alí Beg, having been ever held out to them as the reward for their co-operation, and which the Khán had vowed in numberless fatihas in Bísút. An advance having been determined upon on Séghan and Kahmerd, Mahomed Hussan, after receiving a magnificent Khelat, was dismissed in charge of Mír Weiss, the Khán, in order still to amuse the Hazáras, avowing he would only be satisfied with the personal attendance and submission of Mahomed Alí Beg. One of the Khán's finest horses was also dispatched as a present to the Séghan chief.

*16th march; Bámian to Súrkhdur.* Proceeded up the valley of Bámian under the low hills to the north, mostly perforated with caves, many of which were inhabited. Cultivation was general, and in the bed of the valley were numerous castles. After a course of about four miles the valley narrowed, and passing a defile we entered into the small valley of Súrkhdur where we encamped. The soil and many of the hills were red, whence the name of the spot, the red valley. On the hills were some ancient ruins, and a branch of the river of Bámian flowed through our encampment. A little south of us, but not visible from the intervening hills, was the Azdha or dragon of Bámian, a natural curiosity analogous in character to that of Bísút, but of much larger size. To it the same superstitious reverence is attached, and like it, it is believed to have been a monster destroyed by Azaret Ali.

*17th march; Súrkhdur to Nuh Rígh.* From Súrkhdur we ascended the hills to the north, and for a long distance passed over an irregular ascending surface, the road always good. Numbers of deer were seen in this march. At length, a gradual descent brought us into a small vale, where were some chummun and a rivulet, but no inhabitants, whence another hill of the same easy character as the preceding, was crossed and we entered the valley of Agrabad or perhaps Ak Rapát. Here was some cultivation, a fine rivulet and chummun, with a solitary castle. Ascending the valley, we reached the pass or Kótul Agrabad, having passed to the east of the valley some considerable ancient remains on the hills.

The pass was tolerably easy, but on the summit we encountered a sharp wind, for which it is remarkable, and the pass is emphatically designated a *bád khánu*, or place of wind. The descent was also gradual and unimpeded, and brought us into a fair valley; the rivulet flowing to the north, as that of Agrabad does to the south. At length reached an expanded tract called *Nuh Rígh*, or the nine sands where we halted. Supplies were derived from castles to our right and left, at no great distance, but not discernible—those to the right at a spot called *Ghorow*.

*18th march; Nuh Rígh to Killa Sir Sung, in the vale of Séghán.* When about to march from *Nuh Rígh*, the second son of Mahomed Alí Beg arrived in camp, and paid his respects to the Khán, who immediately dismissed him, and he returned in all speed to his father. From *Nuh Rígh*, the valley contracted and became little better than a continued defile; at one spot, we had to our left, a small grove of trees, denoting a *ziarat*, the branches decorated with a variety of rags and horns of deer, goats and other animals, a mode by which rural shrines in this part of the country are distinguished. A little beyond it, the valley expanded, and we had a ruinous modern castle on the eminences to the right, and there was also an inhabited village of caves. Here we were met by the eldest son of Mahomed Alí Beg; him also the Khán dismissed, and he returned galloping to his father. From hence, the valley was a complete defile, and so continued until it opens a little before blending with the valley of *Séghán*. At this spot Mahomed Alí Beg presented himself, proffered all devotion and submission, and was in return embraced by the Khán. Commanding the gorge of this defile is a castle called *Killa Sir Sung*, seated on an eminence—whence its name, the castle on the rock. Immediately beyond it we crossed the rivulet of *Séghán* and encamped on the rising grounds north of the valley. This castle, the strong hold of Mahomed Alí Beg, had been evacuated by his orders, and he tendered it to the Khán, as a pledge of his sincerity, who ordered *Afghán* troops to garrison it. The castle itself was a rude, shapeless building, with no pretensions to strength but what it derived from its site, although in the estimation of the *Séghanchís*, it is the key to *Turkistán*. On our gaining this ground, we had a fall of snow. About a mile west of us was the castle in which Mahomed Alí Beg himself resided; in that direction were several other castles, and the valley was pretty open.

At Séghán, large supplies were received from Mahomed Ali Beg, but the Khán was also necessitated to draw considerable supplies from Bámíán, as the consumption of the united Afghán and Hazára force, could not be met by the produce of Séghán. Mahomed Ali Beg, however he endeavoured to conceal them, entertained apprehensions for his personal safety, as was evident from his carriage and demeanour. On the evening of our arrival, the gun we had with us was discharged; he was in camp and became much terrified, and was re-assured only when informed that it was an Afghán custom to fire a salute on encampment in a new country. This chief who had rendered himself in these countries of so much notoriety, and who had become the terror of the Hazáraját, was of middle stature, stout built, and from forty-five to fifty years of age. His countenance was forbidding, and his general bad aspect was increased by an awkwardness of his eyes; in fact, he was near sighted. He dressed meanly, but his horse was magnificently accoutred, and his saddle cloth was of gold. For his services to Mahomed Morad Beg in procuring slaves, he had been styled Mín Begli, or the commander of a thousand men; the flattery of Múlla Shahábudín now elevated him into the Chirághudín, or the light or lamp of religion. We here learned that the superior chief of Déh Zunghí, had nearly reached Bámíán with five hundred horse, when hearing of the negotiations pending between the Khán and Mahomed Ali Beg, he had returned in disgust.

The Khán at this place assembled in his tent Mahomed Ali Beg, Mír Yezdánbuksh, Mír Baz Ali, and the various Hazára chiefs, and exhorted them all to a reconciliation. Much debate ensued, and numerous accusations and retorts passed on either side, but ultimately a Korán was produced, and on it both parties swore forgetfulness for the past and good-will for the future. During this scene, the Khán was much ruffled by the pertinacity of some of the Hazára chiefs. Mahomed Ali Beg afterwards restored to liberty some ten or twelve Hazára slaves, as he said, on the Khán's account.

The Khan's naib Sadudín, who from the first had been the medium of his intercourse with Mír Yezdánbuksh, and a party to the many oaths that had been passed between him and the Khán, was now despatched with the Mír to meet Shah Pessund, a Tatar chief on the Dusht Seféd. With a small party of horse they proceeded, and were met on the Dusht by Shah Pessund, also slightly attended.

The Tatar chief accepted as a present from the Naib his chupun of blue broad cloth, and gave him in return his own lined with fur : to the Hazára Mír he presented three horses as peshkush, and he promised the next day to send his brother accompanied by agents on behalf of his allies, with horses as peshkush to the Khán.

The following day the brother of Shah Pessund, with agents of the Sirdar Syed Mahomed, Ferhád, and other Tatar chiefs arrived in camp, bringing four or five horses as peshkush. The agent of Ramtúla Beg, the Tájik chief of Kahmerd also joined with three peshkush horses, but it was known that Ramtúla had sent his eldest son to Kundúz, for instructions how to act in the present conjuncture. The brother of Shah Pessund, was the principal orator in the interview with the Khán. He said, that if it were required of them to acknowledge Afghán supremacy, they could not do so, as they acknowledged that of Mír Mahomed Morad Beg, who content with their simple acknowledgment, and their readiness to furnish Komuk, or an auxiliary force when called upon, did not exact tribute from them. That they would prefer dependency on the Afgháns, to that on the Uzbéks; that the season for action this year was past, but that if the Khán appeared in the field in spring with a fair force, they would join him and march with him even to Kundúz. Under any circumstances, he positively affirmed, that they would not suffer the Khán to enter their lands; that they had numerous gardens, and that if the Khan ventured to enter the Dusht Seféd, he must prepare for an engagement. This language was but ill relished by the Khán, who made use of all his eloquence, alternately menacing and soothing; he even occasionally indulged in terms of abuse, which he uttered, however, in Pushto, to his auditors unintelligible. They firmly adhered to their sentiments, and the Khán ultimately bestowed Khelats on them and dismissed them, vehemently swearing that he would put an end to the shuffling tricks of the Tatars. The agent of Ramtúla Beg, spoke much in the same strain as the Tatar agents, and observed that his master had referred to Mahomed Morad Beg, and if he were willing to relinquish his claims, the Kahmerd chief was ready to acknowledge those of the Afgháns.

The Khán while he vowed not to be satisfied with unmeaning pretexts, was very careful not to speak in ungracious terms of Ramtúla Beg, for whom he professed to entertain a most particular esteem, and regretted that he did not come to his camp and seek his friendship. The fact was, Ramtúla Beg had considerable wealth, which

it was the Khán's object to obtain, and this could only be done by securing his person; on this account, even when in Bísút inveighing against Mahomed Ali Beg, he had always spoken flatteringly of Ramtúla Beg, under the idea that the conversation would be reported to him, and secure his confidence. This Ramtúla Beg, is generally known by the name of Ramtúla Divána, or the madman. For a number of years he has governed the small but luxuriant valley of Kahmerd, and from his youth has passed his life in the enjoyments of wine and music. A man of strong natural sense, he has always contrived to command respect among his neighbours, while his inoffensive manners have disposed the most rigid of Mahomedan bigots, to regard with forgiving eye, his festivities and illicit indulgences. Many years since he had provoked the resentment of the illustrious Killich Ali Beg of Bulkh, who entered Kahmerd with an army. Ramtúlah Beg, on this occasion, collected all his property as sháls, chupuns, silks, kímkábs, broad cloth, horse furniture, weapons, &c. and exposing them to the view of the Uzbek chief, invited him to take what he pleased. Killich Ali Beg took one shál and one piece of kímkáb, a demonstration of friendship rather than of superiority, asserting for himself that he would ever hold his person, wealth and authority inviolate, and as long as he lived, cause others to respect them. He told him also to enjoy the pleasures of wine and music as he had been wont to do. The same indulgence he experiences from Mahomed Morad Beg, who even, considering him a privileged being, himself supplies him with strong drinks, when he may be his guest at Kundúz.

One of the strange events which occurred during our stay at Séghán, was the marriage of the Khán with the daughter of Mahomed Ali Beg, which was solemnized the day after our arrival. The Khán attended only by a few of his peshkhidmuts and his musicians repaired to the Séghán chief's castle, and M'illa Shahabudin performed the nikáh or marriage ceremony. On the morning of the next day the Khán returned to camp and received a variety of congratulatory salutations, but it was plain he was in very ill humour; he had been taken in: his new bride, whom he had expected to find remarkably beautiful from the report of Mulla Shahabadin and others, and from the universally acknowledged personal charms of her mother, proved to be an ill favoured, snub nosed Hazára wench. Moreover it was known to others, though probably not to the Khán, that she was not the daughter of Mahomed Ali Beg, inasmuch as her mother

had been married to a Hazára, whom Mahomed Ali Beg slew, for the sake of obtaining his wife, whose fame for beauty was far spread. He received her pregnant into his family, and the fruit of her labour was the daughter now bestowed upon Hájí Khán.

At Séghán also arrived from Ghuzni, two of the Khán's brothers, Davud Mahomed Khán, and Khán Mahomed Khán. They brought about 100 horse, and reported in high terms of satisfaction, the attentions paid to them in Bísút, particularly their reception at the castle of Mír Yezdánbuksh at Kárzar.

Intelligence was now received of the arrival of the large guns at Bámian. I should before have noted, that on our march from Goweh Khól to Kalú by the Kotul Síah Rígh, the two guns with the elephant were dispatched by the route of Ferai Kholm and Kárzar. The smaller gun reached us at Bámian, but the larger had broken down on the road, and from the delays and difficulties in repairing the carriage, had only now reached Bámian.

It was but natural that the Khán's alliance with Mahomed Ali Beg should excite suspicions among the Hazáras, and the first who manifested them was Mír Baz Ali, next to Mír Yezdánbuksh, the most considerable of them. He, alleging sickness, solicited his dismissal, which the Khán granted, but angrily, telling him not to present himself before him again with his salam, or bow of obedience, and directing him to leave his son with a body of troops in camp. On the ensuing night, Mír Baz Ali, his son and about 500 horse, silently decamped, and the morning but discovered to the Khán that the birds had flown, without shewing the course of their flight. There were still about 2000 Hazára force with us under Mír Yezdánbuksh and the two young chiefs of Déh Zungli.

The Khán having decided to advance upon the Dnsht Sefèd, Raheimdat Khán with one hundred horse, chiefly Jeisálchís, was dispatched in conjunction with Mahomed Ali Beg, to reduce the castles in Kahmerd. The Khán probably expected to gain his objects by finesse and intimidation, as he positively enjoined Raheimdat Khán to avoid battle and the loss of men.

*19th march; Killa Sir Sung to Killa Khwojeh.* On this day the Khán assembled his Káker troops in two parallel lines, and the march commenced with the beating of nakáras. The Gúlam Khánu troops marched in advance, and I this day accompanied them. We passed easterly down the valley, which a little below Killa Sir Sung, narrows for some distance, and again



expands when we found several castles and kishlaks, the largest of the former being Killa Khwojeh. We had reached the foot of the Kotul Nal-patch or the pass horse-shoe breaker, leading to the Dusht Seféd and were preparing to ascend, when people sent by the Khán called us back, and we found the halting place was Killa Khwojeh.

The Khán, before dismounting proceeded with a large party down the valley, which below the parallel of the Kotul, contracts into a defile, for the purpose of viewing the remains of an ancient fortress called Killa Káfr, the infidel's fort. They were very imposing, and from the bulk of the stones employed in their construction, excited much wonder. At the extremity of this durrah is a castle, whether ancient or modern, I know not, called Durbund, a contraction of Durrah bund, the bund or key of the valley, and east of it is another called Byánír. In this short march, our route traced the northern side of the vale of Séghan, and we passed a village of caves, with an ancient tower on the eminence in which they were excavated. This evening fired from our gun several rounds, as well to celebrate our arrival on new territory, as to let the Tatars know we had come. Killa Khwojeh with another castle was garrisoned with the Khán's troops, and the castle of a chief Fakír Beg, who had been long obnoxious to Mahomed Alí Beg, and who was related to the Dusht Seféd chiefs, was ordered to be demolished. The wood found there was used as fuel by the army. Fakír Beg was dispatched with his family to Bámíán, the Khán promising to provide for him there.

The day after our arrival at Killa Khwojeh, snow fell; and the Khán invited me to take noon's repast with him in his khergha or felt covered tent. Here were present the Khán, his Naib Sádudín Múlla Jahan Mahomed, Mír Yezdánbuksh, Mír Zuffer of Kálú and myself. On my account the Khán principally discoursed of Feringhís, and he astonished his Hazára guests by his accounts of their "insaf" or equity. He related the history of Amír Khán, (the freebooter of Tonk,) and so curiously, that I shall repeat the substance of it. Amír Khán had one hundred and twenty thousand men, and was flying before twelve thousand Feringhís, when the latter sent to him, offering as much artillery as he needed, and a crore of rupees, if he would but stand and give battle. Amír Khán received artillery and a crore of rupees, gave battle and was defeated with the loss of twenty-seven thousand men. The Feringhís lost six thousand men. Amír Khán, reflecting on the diminished force of

the Feringhís, again ventured to engage, and suffered defeat with the loss of twelve thousand men; his opponents lost three thousand men. Amír Khán having still nearly eighty thousand men, judged it concerned his honor not to suffer so small a force as three thousand to escape, and surrounded it, but he found that in the night the Feringhís had eluded his vigilance, and learning that they had summoned another Kampú of twelve thousand men to their assistance, he shifted his quarters to another part of the country. Ultimately when the Feringhís concluded a treaty with him, knowing him to be an able useful man, they gave him an allowance of fifteen lacs of rupees annually, with other five lacs of rupees for his haram, placing only one injunction upon him, that he was never to turn his eyes towards the Afgháns. The Khán observed that the Sirdar Mahomed Azem Khán, then living, upon hearing the terms of the treaty, placed his turban on the ground before him and prayed to heaven, that he might one day become the gúlam (slave) of the Feringhís. The Khán in the course of this day's conversation remarked that the gross revenue of Kábul, Ghuzní, Jelalabad, Bámian, and Bísút for the year past 1831, 1832, was fifteen lacs. Taghow, Dhost and Khourum being rebellious not included. Mír Yezdánbuksh spoke very little, continually passing his beads between his fingers, uttering indistinct ejaculations, with his eyes averted upwards. As usual with him he sat bare headed. The Mobá or Cholera Morbus which desolated Kábul in 1827 being alluded to, the Mír took occasion to state his disbelief in the remedies of physicians, and observing that no one case of Mobá occurred in Bísút, asked what has disease to do with men who lived upon barley bread, and buttermilk? The Khán cited the case of a portly old physician who was with the camp that year in Zúrmut, and who one day in his tent, affected to ridicule the Mobá, saying if every one like me anointed his body with oil, he would have no reason to fear the Mobá. With the words in his mouth, said the Khán, he left my tent, and a very short time after, I heard that the fat old gentleman with his oiled body was dead!

On the following day, in the afternoon, the nakára beat to arms, the Khán having determined upon making a reconnoissance on the Dusht Seféd. Mír Yezdánbuksh accompanied him with about 50 horse only. The troops ascended the Kotul Nál-patch, rather long but not difficult, and at the summit were in view three of the Tatar castles with their gardens. The Khán halted the Gúlam Khánu

troops midway up the Kotul, saying he did not wish to fatigue them. The Tatars soon descried the troops, and their horsemen issued from the castles and took position on the plain, but again entered the castles. Persons therefrom were observed to send them back. The Khán used his spyglass and speculated on their numbers. During the few minutes he remained on the plain, he once enquired "where is Mír Yezdánbuksh?" and looking around, and observing him to be attended by Davud Mahomed Khán and his party, remarked "all is well, he is amusing himself with Davud Mahomed." The Khan and troops, rejoined the camp it being yet day light. On arrival he dispatched Syud Mahomed Khán with personal communications for Mahomed Ali Beg at Kahmerd.

*20th march. Killa Khwojeh to Killa Sir Sung.* In the morning of this day, the Khán summoned to his Khergah, his Naib Sadudin and Mír Yezdánbuksh. They having arrived, he then sent for Mír Abbas, brother to Mír Yezdánbuksh, and others of his relatives and officers, with the two chiefs of Deh Zunghi, who came supposing Mír Yezdánbuksh required their attendance, as they were told. The Khán, when his brother Davud Mahomed Khán entered the Khergah, followed by a large party of armed Afgháns, angrily asked Mír Yezdanbuksh why he had thrown defeat among his troops, and occasioned a triumph to the Tatars? The Mír aware of his critical situation, said, "Khán, place me in front, and see what I will do with the Tatars." The Khán spoke abusively in Pushto, rose, and ordered the seizure of the Mír and his attendants. This was effected without resistance, as those admitted within the Khergah were few, the others of the Hazáras summoned standing without, and their detention was an easy matter. The nakára sounded immediately to arms, and Ghúlam Hakumzádeh was dispatched to plunder the Mír's tent. The Khán having effected this coup, stood without his tent in a state of manifest surprise, and anxiety. The presence of 2000 Hazára horse might also give him uneasiness, but fortune as if favoring his designs had divided this force into three bodies, one with the Mír and the Afghán camp, and the two others in villages of Samuches, north of the valley, which they had occupied on the fall of snow. The Khán had no cause for apprehension from the Hazáras; the poor fellows were paralyzed by the seizure of their chiefs, and had no other thought but to provide each for his individual safety. The portion with the camp, mounting as soon as possible, passed some down the valley of Seghán, while others ascended the hills

south of the valley, and made for Gunduk. Those in the Samuches scrambled up the hills behind their position, which were absolutely impracticable to the Afghán horses, and some made for the Dusht Seféd, while others traversed the Dusht Ghuzzuk between Seghán and Kahmerd and made for Yek Auleng. So soon as the seizure of Mír Yezdánbuksh was known, the Káker troops hastened to despoil the Hazáras, and obtained a great number of horses, arms, and accoutrements. The pursuit of the fugitives was kept up principally by the attendants upon the horses, and such was the panic among the former, that one of the latter would be seen returning with two or even three horses, and as many swords and matchlocks. It was afflicting to behold the unfortunate Hazáras made captives, and in the midst of snow and inclement weather, reduced to a state of nudity by their merciless tyrants; even the brothers and officers of Mír Yezdánbuksh were not spared, and the Mír himself was the only person the Khán judged fit by peremptory order to command to be respected as to clothing, and from his girdle, the knife was taken by those who seized him. A son of Mír Mahomed Shah, and nephew to Mír Yezdánbuksh, one of my hospitable entertainers at Kerghú, as noted in my 3d march, was among the sufferers, and was dragged past me by three or four Afgháns, who called him their prisoner, shivering, barefooted, and without any other covering than an old pair of perjammās (trousers) which his despoilers, in their humanity, had bestowed upon him. I said "Mír what has happened to you?" He replied "Bud róz amed" or "an unlucky day has come." He was taken before the Khán, who aware that his father Mír Mahomed Sháh was inimical to his brother Mír Yezdánbuksh, ordered clothing to be given to him, and his horses and arms of some value to be returned. These orders were in part complied with, and the next day I found him only wanting a pair of shoes, with which I was able to supply him. The only precautionary measures taken by the Khán on seizing the Hazára chiefs, were the dispatch of his two brothers, Davud Mahomed Khán and Khán Mahomed Khán, to the base of the Kotul Nál Patch, rather to anticipate a movement on the part of the Tatars, than to prevent the flight of the Hazáras in that direction, and sending a few horsemen to the Killa Sir Sung, to instruct the garrison of what had happened. It now became known that Syud Mahomed Khán, Pughmání, who had been commissioned the preceding night to Mahomed Ali Beg with a verbal communication,

was sent to announce the intended seizure of the Hazára chiefs on the next morning. The Khán had also sent intimation of his designs to his agents at Bámian, and one of them, Wullí, a chillumberdar, was employed to secure the persons of Alladat Khán Moghul, and others who were known to be of the party of Mír Yezdánbuksh. This he effected by summoning them to the castle of Agrabad, on the pretext that the Khán had sent for them, and on their arrival, he made them prisoners.

Immediately after the seizure of Mír Yezdánbuksh, I joined the Khán, standing without his Khergah, now become a prison. Naib Sududin, his agent in all transactions with the Mír, was astounded, and said in Pushto "Khán, se kuwí?" or "Khán, what have you done?" The Khán replied in Persian "say nothing, what is done, is done." After standing some time, and observing the departure of the Hazáras, he repaired to the tent of Mahomed Bágher Khán, Morad Khání, of the Gúlam Khánu troops. These men being Shías, and intimately connected with Mír Yezdánbuksh, by political and religious ties, could not but be much incensed at the flagrant act just committed. To them the Khán sought to justify himself, by asserting that the seizure of Mír Yezdánbuksh, was a measure pressed upon him by the Sirdar Dost Mahomed Khan, when in Tagow, that he had repeatedly written to him since he left Kábul to seize the Mír, that hitherto he had refrained from doing so, nor would he now have obeyed these instructions, had not Mír Yezdánbuksh treacherously concerted a plan with the Tatars, by which they were to engage the Khán's troops in front, while he was to pilage the camp, and destroy those who remained in it. In confirmation of this charge, he read a letter, that he asserted had been taken from a messenger sent by the Mír to the Tatars. I was not present at the reading of this letter, which was moreover known to be a forgery and written by Gúlam Hakumzádeh at the Khán's suggestion; but the Gúlam Khánu officers afterwards assured me, that it was far from cleverly done, for there was nothing in it to warrant suspicion even in the Khán's mind.

After remaining with the Gúlam Khánu until after mid-day, orders to march were issued, and the troops in order of battle, retrograded to their former position near Killa Sír Sung. The Khán with his line marched first, after him the Gúlam Khánu horse, and behind them the captives, while Davud Mahomed Khán and Khán Mahomed Khán brought up the rear. The prisoners were about

twenty in number, and this day mounted on horses, their arms secured behind them, by ropes at their elbow joints, while other ropes were fixed round their necks, with the ends hanging down to be taken hold of by the persons having immediate charge of each of them. The unfortunate men were preceded by Múlla Shahabudín and the Khan's nephews. I saw Mír Yezdánbuksh when he left the Khergah to mount his horse; he raised his dejected head, cast a momentary look around, and again dropped it. I believe there were few in camp but commiserated his case; to behold him, who in the morning was the superior lord of Bísút, who commanded a numerous force, and held arbitrary power over many thousand dependent human beings, in the space of an instant, reduced to the powerless situation of a captive in bonds, would occasion feelings of consternation, as an exemplification of the ordinary vicissitudes of life; but when the Mír's frank and generous character, the many services he had rendered the Khán, and above all, the perfidious circumstances of his seizure, were considered, I believe there was not a bosom in the Afghán camp, that glowed not with indignation, and such as dared to express their feelings, consigned to execration the contrivers and perpetrators of so infamous a deed. I came up on this march with the Gúlam Khánu troops, and Mahomed Jaffir Khán. Morad Khán significantly asked, "Dídí, or "Have you seen?" on replying affirmatively, he enjoined, "By such perjuries and atrocities the Afgháns have lost their political power and influence."

During the past night, I learned, that the Káker troops, by the Khán's orders, had been under arms, and that he himself had sat up in his tent without taking sleep, his musicians until near morning, playing and singing before him. When he dismissed these, he enquired if there were any movements among the Hazáras, and observed to one of his peshkhidmuts, that if Mír Yezdánbuksh fly, "bukht" or "fortune" is on his side, if he remain until morn, it is on mine.

It was subsequently ascertained that the Hazára chief yielding to the unanimous and urgent entreaties of his followers, to decamp, had ordered his horses to be saddled; that he had left his tent, and actually placed one of his feet in the stirrup preparing to mount, when he withdrew it, observing that he was a Kohistání or man of the hills, that he had attached himself to the Khán by oaths, by which he was resolved to stand, even were the consequences fatal to him. Having thus spoken, he returned to his tent, and the Hazáras unsaddling their horses, returned to their quarters.

I must confess, I was confounded at the Khán's procedurc. I had never before witnessed the commission of so flagrant an enormity, and aware of his secret designs, could not conceive why he preferred the alliance of Mahomed Alí Beg to that of so powerful a chief as Mír Yezdánbuksh. I could not for a moment credit the treacherous intentions imputed to the latter, who, had he been faithless or insincere, could easily have destroyed the Khán and his army when on the frontiers of Búrjehgáhi. The surprise and sorrow of the Khán's Naib Sadudín, was a convincing testimony also of the injustice of the charge fixed upon the Mír. The letter produced by the Khán, was known to be forged, and on the Mír's person at the time of seizure, was found a letter addressed to his dependents at Kárzar, directing them to make all due preparations for the entertainment of the Khán on his return; and his naçir Mír Alí Khán had been deputed to Kábul to purchase the kharwars of rice for the festive occasion contemplated. It appeared to me also a heinous refinement of cruelty in keeping up good appearances with the Mír, until he had led him into the country of his avowed and unprincipled enemy, and by his seizure there, affording the Tájik chief a gratuitous triumph, more galling to the generous mind of his victim, than the loss of power and fortune. An accession of territory at the expense of the Tatar chiefs of the Dusht Séféd, was evidently an object with the Khán, and he may have expected that by the Hazára chief's influence with them, he might have been enabled to secure their persons, after which the confiscation of their estates was an easy matter. But being battled by the firmness of the Tatar chiefs, and finding that Ramtúláh Beg of Kahmerd, would not voluntarily surrender his country, and was too wary to place himself in his power, he, regardless of every tie of friendship and moral obligation, seized the Mír, expecting to procure a large sum for his ransom, which might enable him to subsist his troops during the winter at Bámán. Could I venture to fathom the original intentions of the Khán, he had contemplated to pass the winter at Kahmerd, where he would probably have subsisted his troops, and whence in concert with the U'zbek chief of Khúlm, decidedly hostile to Mahomed Morad Beg of Kunduz, he might have been enabled to have acted in a very different mode from that, to which necessity afterwards compelled him. As it was, the obstinacy of Ramtúláh Beg had foiled him; he could not subsist at Séghán; Mahomed Alí Beg had no property worth the seizure, and he had no resource

but to retrograde to Bámíán, and the question was how to subsist himself there. The revenue from the soil of Bámíán with its districts amounts to fifteen thousand kharwars of grain, whether wheat, barley, or múshúng (pea.) This had been exhausted by previous receipts and requisitions while in Bísút, and even at this place. The premature and unusually severe winter had also materially affected the year's produce, and heaps of untrodden wheat were yet lying rotting under snow. That the Khán possessed eminent ability in meeting the exigencies of his situation, may be conceived, although it was lamentable to reflect upon the unhallowed means employed.

At Killah Sir Sung, on the next day, we were joined by Mahomed Alí Beg and Kurra Kólí Khán, on the part of Raheimdat Khán. They reported the capture of four castles of Ramtúláh Beg, who still held two, the more important, and refused to wait upon the Khán. A negotiation had been carried on with him, and it had been agreed under the plausible pretext of preventing the effusion of Musulmání blood, to refer matters to Mír Mahomed Morad Beg. Ramtúláh's castles had not been taken without bloodshed; two or three men on the part of Raheimdat Khán had been slain, and several had been wounded: to attend upon these, the Khán dispatched his surgeon to Kahmerd giving him ten rupees. On this occasion Nusrúláh Khán the chief of A'jer, was introduced to the Khán, and proffered his submission. He was courteously received, and a Khelat was bestowed on him. He was a young man of ordinary appearance and capacity, and inherited from his fathers the hill fort of A'jer, some miles to the west of Kahmerd, with two dependent castles.

The Khán paid a visit to Mír Yezdánbuksh, at this place, offering him terms, by acceding to which he should be released. These were the payment of rupees twenty thousand in money or value, the surrender of the castle of Kárzar and two or three others on the line of road from Bámíán to Kábul, his engagement not to levy duty from káfilas, and the delivery of adequate hostages for the performance of his obligations.

Mahomed Alí Beg, unequivocally pressed upon the Khán, the necessity for the Mír's execution, alleging that if released, neither one or the other would be able to move in these countries. Mahomed Alí Beg had become proportionately confident on the seizure of his adversary, and he had probably turned to good account the dispersion of the Hazára force, and recompensed himself for the



ten or twelve Hazára slaves he had formerly set at liberty. The route of many of the fugitives must have been over the Dusht Ghuz-zuk, between Kahmerd and Séghán, where he, informed of the intended act, would have been ready to intercept them. Subsequently Mír Yezdánbuksh affirmed that three hundred and ten were missing, but I know not whether this number referred to the whole force, or to that under his own orders. Many of these may have perished from cold, but the greater number were probably kidnapped.

Mír Yezdánbuksh was still lodged in the Khán's khergah, and the Hindústaní soldiers formed his guard. It was decided to retire to Bámian. The Khán had but three pairs of leg-irons with him, but his Tajik ally cheerfully furnished him with six other pairs from his own stores, and now Mír Yezdánbuksh and the principal captives had their feet bound in fetters. Melted lead was poured into the locks which secured them, to effectually prevent their being opened.

Another fall of snow occurred at Séghán, and one morning a little before the break of day, the heavens displayed a beautiful appearance from the descent of numberless of those meteors called falling stars; some of the globes were of large size and of amazing brilliancy. They pervaded the whole extent of the visible firmament, and continued to be discernible long after the light of day dawned. The phenomena, I afterwards found, were in like manner observed at Kábul, and I have since learned on the banks of the Jaylum in the Punjáb. Their appearance gave rise to much speculation in camp; every one considered them portentous of some great event, which each felt at liberty to prognosticate after his own manner.

*21st march; Killa Sir Sung to Nuh Rígh.* We now started on our return to Bámian. The Khán this morning preceded the troops, with a few followers, Múlla Shahabudin and the Khánzádehs, Múlla Jáhan Mahomed and myself. We followed the valley until we arrived at the spot called Nuh Rígh, where we had before encamped. We now found it covered with snow, but it was determined to halt for the convenience of procuring supplies from the contiguous castles. At the point where the narrow valley expands into the open space of Nuh Rígh, the Khán and Múlla Jáhan Mahomed seated themselves on a rock overhanging the line of road, and his purpose in marching before the troops was soon made evident. The méters, troopers, and indeed all who arrived, were stopped and examined as to their possession of Hazára property. The horses,

weapons, &c. were taken account of by Múlla Mahomed and Múlla Shahabúdin, with the names of the persons possessing them. The Khán did not take the articles from the men, but observed he should consult with his chiefs as to the disposal of the spoil; he was perhaps also willing by an enumeration of the trophies to estimate the extent of his dishonest and bloodless victory. I had taken position on the eminences east of the valley, which were free from snow, and as the troops successively arrived, observed with regret the unfortunate Mir Yezdánbuksh, with Mír Abbas his brother, the two Deh Zunghtí chiefs and other captives, approach in charge of Dost Mahomed Khán, the Khán's brother, manacled and seated on pairs of chests carried by yabús (ponies.) It became manifest that the Mir's doom was decided upon, for after exposing him to so much indignity, release was out of the question. As the tents had not arrived and snow covered the ground, Dost Mahomed Khán brought his prisoners near the spot where I was sitting, where they continued until the ground designed for the tents was cleared, when a fire being kindled, the Mir in fetters walked thither. He sat over the fire, warming his hands, apparently unconcerned, amid snow and severe cold bare headed.

*22nd march; Nuh Rígh to Bámíán.* This day, continued our march up the now more equal and open valley, and crossed the pass of Agrabad, which although covered with snow, did not impede us, and fortunately the wind was little more than perceptible. Traversed the valley of Agrabad, and passing the slight Kotul to the east, entered the inferior valley before noted as containing chummun, which I now descended, having before seen the road to the right over the elevated country. Soon gained a narrow valley which after some distance joins that stretching from Agrabad, whose rivulet we had now with us. Our road was tolerably good, and as we descended the valley a considerable rivulet fell into it from the west, and again lower down received also from the west a still more considerable stream; these united waters form one of the branches of the Bámíán river and flows through Súrkhdur. Just before reaching this place we passed a small grove of trees, a Ziarat. From Súrkhdur we pushed forwards to Bámíán, where we arrived before nightfall. The Khán on arrival took up quarters at a castle where on marching for Séghán, he had left the wives brought from Kábul; and myself with Sirkerder Kumber, the physician Iddytúlá and his son, pitched a tent in a hollow under its southern walls. The

**Khán** informed the inhabitants of **Bámíán**, assembled to greet his return, that if perfectly agreeable to themselves, he would be their guest for ten days, it being necessary to settle his affairs with **Mír Yezdánbuksh** and others.

His first step was to settle the amount of jirimah or fine on such individuals as were obnoxious to him, that is, on such as had property that he might appropriate. The greater part of these had been made prisoners at **Agrabad**, as before noted, through the dexterity of **Wullí the chillumberdar**. The amount obtained by jirimah was not less than rupees thirty thousand, although received in effects, as carpets, felts, woollens, copper utensils, lead, and cattle of various kinds. Their connection with **Mír Yezdánbuksh** was the crime imputed to them, and the **Khán** assumed great credit to himself with most of them, for having re-directed them into the path of Islam, from which they had deviated by associating themselves with shías and infidels. Another of the **Khán's** immediate objects was to obtain possession of the castle of **Syudabad** belonging to **Al-ladat Khán**, **Moghul**, who had laid up in it a vast quantity of supplies. The **Moghul** was a prisoner and consented to pay his fine, but was unwilling to surrender his castle, on which the **Khán** sent for his elephant, and ordered him to be trampled under its feet. **Al-ladat** now craved for mercy, which through the mediation of the **Gúlám Khán** chiefs was conceded. The following morning the inhabitants of the castle evacuated their dwelling, being permitted to carry away their grain and effects, excepting forage and fuel. The **Khán**, with five or six attendants and myself, rode to survey the new acquisition. We crossed the river of **Bámíán** and skirting the southern face of the detached eminence on which stands the ruined citadel of **Ghúlghúleh**, ascended a level space on which is the castle of **Syudabad**. It was a dilapidated, but truly imposing ancient castle, constructed of burnt bricks. We entered it by a modern gateway on the south; the original entrance was an arched one to the west, of very large dimensions, which had been long since closed up. The walls were of immense solidity, while the burnt bricks employed in their structure were of surprising size. The apartments were ranged in lines with the walls, leaving a small area in the centre. Those of the ground floor were twenty-five to thirty feet in height, and they had above them others equally lofty and capacious. The whole of them had been originally covered with domes, a construction adopted in the old city of **Gúl-**

ghúleh, but these have nearly all yielded to the attacks of time, and at present the roofs are flat and supported on rafters. West of the castle is a large walled enclosure called the Serai, having on the west a line of domed buildings but modern; near them are the remains of the old musít belonging to the castle, exhibiting the same style of solid architecture. In the enclosure is a well, also a recent addition. The castle of Syudabad is called in the traditions of the country Killah Dokhtur, the daughter's castle, having been, as it is said at the period of the reduction of Ghúlghúleh, the residence of a princess, the daughter of its sovereign, who married the besieging chief, and betrayed her father by disclosing the hidden channels through which water was conveyed to the citadel. The castle, without ascribing much credit to tradition, was undoubtedly one of the most prominent structures of the old city of Ghúlghúleh, but manifesting a Mahomedan origin and probably built under the sway of the Caliphs. Ghúlghúleh, we know from authentic history was destroyed by Genghiz Khán in 1220 A. D. and afforded some time a refuge to Jeláudin, the expelled Sháh of Khwarizm. About two hundred yards from it on the north east, are other buildings referrible to the same era. It would appear to have remained in an uninhabitable state, until about thirty years since, when a governor of Bámian, Mirza Mahomed Ali, affecting a kind of semi-independence, covered in the exposed dwellings, built the serai and sunk the well. In it he endured a twelve month's siege by Kilich Ali Beg of Bulk, who ultimately decamped without effecting the reduction of the fortress. Since that time or soon after, Mirza Mahomed Ali retired to Zohak, which he intended to repair and to place in a state of defence, and there being proclaimed a traitor he was slain by the inhabitants of Bámian. Since the fall of the Mirza, the castle of Syudabad had been held by Alladat Khán Moghul, and he, confiding in the strength of his walls, which cannot be destroyed by any means at command of the governors of Bámian, lived perfectly independent of them, refused to pay the usual third of the produce of his land, and even occasionally attacked his neighbours. He and his castle had now fallen beneath the ascendancy of Háji Khán's stars, and after a survey of the building, its new possessor decided on occupying it himself, and sent orders for the expedition thither of his wives and followers. In the castle, where he had hitherto resided were left the Hazára prisoners under charge of the

**Khán's** brother, **Dost Mahomed Khán**, and the **Hindústání** soldiers. The **Khán** repaired to a modern musjit at the entrance of the castle, and with a **Korán** in his hands, implored the favor of heaven on his new conquest. The ejection of about eighty families in the midst of winter, and depriving them of fuel, and provender for their cattle, turning a deaf ear to the prayers of the aged women of the castle, who appeared before him each with a **Koran** in her hands, exhorting him to look in the face of God, and be merciful, were perhaps **Musulmání** actions; but it was necessary, in the midst of the perpetration of crime, to preserve religious appearances, and to shew his followers, that whatever might be done from necessity, he was still a true and devout **musulmán**. Within the castle were large quantities of clover hay, wheat chaff, chelmer and wood; without the former, the **Khán** might have been embarrassed as to the subsistence of his horses. I selected an apartment on the ground floor, which was large and convenient; a stable was adjoining, and there were two or three recesses in it full of chaff, wood, and chelmer, and I admitted no companions but the old physician **Iddytúlá** and his son. The whole of the **Khán's** horses were brought to **Syudabad**: the most valuable were housed within the castle, and the remainder were picketted in the adjacent serai. The **Khán's** brothers **Davud Mahomed Khán** and **Khán Mahomed Khán**, had taken up quarters in the caves of **Bámíán**, the **Káker** troops had sheltered themselves in the several castles, and the **Gúlam Khánu** troops only remained encamped in the snow.

We shall now advert to the affairs of the **Hazáraját**. The seizure of **Mír Yezdánbuksh** had produced an universal sensation of indignation among the **Hazáras**, and **Mír Baz Ali** had repaired to **Kázar** to concert measures with his friends there for resistance to **Hájí Khán**. The letters of **Mír Yezdánbuksh** to his adherents there were unattended to, and the replies were full of terms of defiance to the **Khán**. Whether the **Mír** was sincere in wishing his letters to be complied with, I know not; he said, he was, and at his instance seconded by the entreaties of **Naib Sadudin**, who to do him justice, was ever anxious to be serviceable to his unfortunate friend, **Mahomed Gúl** one of his confidential friends and a prisoner, was released and dispatched to **Kázar**, that he might by personal explanation induce the people there to surrender the castle and the hostages required, and procure the release of **Mír Yezdánbuksh**. The **Khán** was not pleased to allow **Mahomed Gúl** to depart, and **Mír Ma-**

homed Sháh brother to Mír Yezdánbuksh, now with the Khán, protested against it. He however went, making a thousand vows of fidelity to the Khán, and imprecating the vengeance of heaven on himself, if he proved false. On arrival at Kárzar, he, but confirmed the assembled Hazáras in their determination to hold it. The winter seeming to allow no military operations to be carried on against Kárzar; Mír Baz Ali returned to his home, writing a letter of ambitious tendency to the Khán. The principal men at Kárzar, were naçir Mír Ali and one Kásim, the former had been sent to Kábul to purchase rice and articles for the entertainment of the Khán on his expected return, and the latter had been left at Kárzar by the Mír, to attend to the affairs of Bisút, during his absence. They were now joined by Mahomed Gúl. A party of four individuals from Kábul, three Kohistánis and one native of Kábul, driving asses laden with fruit and articles to sell in camp, unconscious of what had happened at Sèghán, fell into the power of the Hazáras near Kárzar. The three Kohistánis making resistance were killed, and the Kábulí was brought to the castle, where his life was spared, and he was set at liberty, but in a state of nudity.

As the communication between Kábul and Bámíán was now cut off, there were many reduced to much inconvenience and distress, and a good deal of discontent existed among such as did not like the Khán to entertain the idea of wintering at Bámíán. The Gúlam Khánu troops were very uneasy, and for some time past had been continually soliciting rúksut or leave to depart, but the Khán had hitherto contrived to delay giving it. To their ordinary capacities, the extraordinary measures of the Khán were perfectly incomprehensible; surmises as to his ultimate intentions were also heard. The Khan's brothers did not approve of his stay at Bámíán. The natives of Bámíán were nearly reduced to despair by the abstraction of their means of subsistence for the supply of the troops; so awful a visitation had never before fallen on them. The mysterious and absolute Khán was not to be resisted, but they had a slender consolation in the reflection that no one had ever, with impunity, wantonly tyrannized over Bámíán, under the protection of its twelve thousand wullís (saints).

Matters remained in this perplexed state until the 8th Rujub, when the Khan repaired to the castle where Mír Yezdanbuksh was confined, and after a secret conference with his brothers Davud Mahomed Khán and Khán Mahomed Khán, ordered the execution

of the Mír, as he said, from necessity. He enquired of Múlla Shahabudín, if the destruction of Mír Yezdanbuksh was justifiable by the laws of the Korán, who replied that it was absolutely indispensable, adding that it was better that death should be inflicted by the hands of his own kinsmen.

A peshkhidmut Mahomed Khán, repaired to the Mír, and told him to rise, as he was wanted without. The Mír asked if it was intended to kill him? Mahomed Khán replied that such were the orders, on which he immediately rose, and followed the messenger. He was led to the border of a canal of irrigation under the castle wall, where he sat down until the preparations were completed. He begged as a favor that his hands might be united, that he might repeat two rikáts of prayer; the favor was refused. He therefore, as a devotionary act was compelled to be satisfied with passing the beads of his tusbíh or rosary between his fingers, and making low ejaculations. The preparations being slow, a controversy having arisen among those concerned, whether a thin or thick rope was preferable, strangling having been the mode of death ordered, the Mír expressed his hope that he should not be made to suffer any lingering torment, and wished that with swords, they would strike directly at his neck. A thick rope had been decided upon. The same peshkhidmut asked the Mír, if he had any thing to say; he looked around for a moment, and observed, "no, what have I to say? They must all follow me, ráh um ín ast," or "the road is this." The rope being fixed, the Mír was led into the hollow south of the castle, and six kinsmen were stationed, three at each end of the rope; among these was his brother Mír Abbas, and two sons of the Vakil Syfúlah. The former being a prisoner, compulsively assisted, and the two latter were afforded an opportunity to avenge the death of their father slain by the Mír. His corpse was thrown across a yabú and instantly dispatched to Kárzar. Thus fell Mír Yezdánbuksh, a victim to Afghán perfidy and dissimulation. His firmness in meeting death was admired even by his executioner, and it was observed that in lieu of evincing any signs of anxiety or dejection, his countenance was more ruddy than usual. It was also discovered that he had been slain on an excellent day and time, as the month Rujub was the best of all months for a músúlmán to die in, and the Roz Juma the best of all days.

The slaughter of their chief, did not cause his adherents at Kárzar, immediately to surrender the castles, as perhaps the Khán had hoped, but soon afterwards letters arrived with ambiguous offers,

which Mír Zuffér of Kálú pronounced false. Kurra Kúlí Khán who had been despatched to Kundúz now returned, bringing with him an Agent of Mahomed Mórâd Beg, with a message to the following purport. "If the Khán be my elder in age, he is my father; if my equal, my brother, and if my younger, my son." The Khán now resolved to despatch a formal embassy to Kundúz, and Gúlam Hakum-zádeh was selected, and to him were given as presents for the Uzbek chief, most of the presents brought from Sind by Mullâ Jáhán Mahomed.

The Gúlam Khánu troops now became clamorous for their rúksut or dismissal; they had no idea of finding themselves isolated among Uzbeks, if they remained, a possible circumstance; and at length, somewhat angrily, the Khán consented to their departure. They were contented to brave the rigors of a wintery passage through Bísút, and reckoned by their influence among the Hazaras to procure a passage by the castle of Kárkar. A Kafilá which had arrived from Bokhara placed themselves under their protection. The Rikas, at variance with the rest of the Gúlam Khánu troops and being also Súnis, with Syud Mahomed Khán, Pughmání, remained. The Khán on dismissal of these troops gave them a barát or order for three days supplies on Kálú. Many were desirous to accompany the Gúlam Khánu troops, but the Khán cajoled them with the promise of going himself to Kábul in a few days, when the castle of Kárzar should surrender. The Gúlam Khánu troops on reaching Kárzar were detained three days under its walls, and had to endure all the horrors of an unusually intense cold, rendered still more terrific and fatal by a powerful Shumál wind, amid snow breast high and without fuel. The Hazáras assembled, and although a few shots were fired, no one suffered from them. Mahomed Bágher Khán, Mahomed Jaffir Khán, Mír Ali Khán and two or three other chiefs were only admitted within the castle, and at first were made prisoners for some hours, but finally an arrangement was concluded, by which ten tománs were given for a free passage, and hostages were delivered as pledges that no violence should be offered to the Hazára peasantry between Kárzar and Sir Chishmeh. Moreover all the horses, arms accoutrements and clothing, spoil of the Hazáras, which were easily recognised, were taken from all who had them in possession. The terms of this treaty complied with, the Gúlam Khánu troops proceeded through Bísút, having no other antagonist than the cold, itself a formidable one. Forty-five individuals of the party perished; and



of those who reached Kábul, great numbers had to deplore the loss of toes and fingers, many of their hands and feet altogether. The destruction of cattle was also immense, and the camels particularly suffered.

Raheimdat Khán, with Mahomed Ali Beg, and the young chief of Ajir, about this time arrived from Kahmerd, a reference respecting that district having been made to Mahomed Morad Beg. Mahomed Ali Beg strove to dissuade the Khán from remaining the winter at Bámian, a purpose which he now avowed. With respect to Kárzar, he observed that the Khán did only impede measures. On the seizure of Mír Yezdánbuksh, he ought to have slain him and sent a force in chapow upon the castle. As it was, he suggested that the U'lús force of Bámian should be called out, scaling ladders prepared, and volunteered in conjunction with Rahimdat Khán to reduce the fortress by assault: these measures were not adopted.

Another kafila arrived from Bokhara; with it were two or three Loháni merchants—these had sufficient penetration to conjecture the Khán's designs, and recommended him, in course of conversation, not to return to Kábul, where he would become degraded, but to repair to Kundúz where his honors would be increased. Two or three days after, the Khán confined those merchants demanding from them the loan of one thousand tillahs (gold coin) of Bokhara. They refused, and fasted a day or two, vowing they would starve themselves to death; the craving of hunger becoming intolerable, they tendered five hundred tillahs, which the Khán accepted, and released them. The tillah of Bokhara is in value about seven rupees of Kábul, so that the Khán profited by the merchants three thousand five hundred rupees.

Davud Mahomed Khán the Khán's brother, had for some time been at Irak, where he had occupied the castle and confiscated the property of Syud Shah Mahomed, one of the individuals on whom a fine of rupees three thousand had been imposed. He now came to Bámian, and with his brother Khán Mahomed Khán, signified to the Khán, that they should proceed to Kábul. He used every argument to dissuade them, but ineffectually, and they told him that they were servants of Dost Mahomed Khán and not of himself. Rúksut was therefore given to them and to the Rikas, and Syud Mahomed Khán, Pughmání, with many others to accompany them. I had long been very much distressed, and refrained from accompanying the Gúlam Khánu troops, only because they proceeded a

little against the Khán's pleasure, but now that his brothers had obtained rúksut, I asked mine, which was of course granted. The Khán promised to place me under protection of his brothers, but did not, and as they had left Bámíán, I followed them, accompanied by one Burkut, a young man of the Balla Hissar Kábul, who had two horses to convey thither, and who engaged for a trifling sum, to attend me and my horse on the road—and to place my luggage on one of his horse, so that I and my animal might be unincumbered. My object was now to reach Kábul, but how or by what road no one knew; the two brothers of the Khán and Syud Mahomed Khán, Pughmání, had vowed not to return to Bámíán—but it still remained to decide in what mode to reach Kábul. As Afgháns, they could not expect so easily as the Gúlam Khánu troops, to pass the castle of Hazára; however there seemed a general resolution, if compelled thereto, to force a passage by the castle, and to fight their way through Bísút. On the other hand Syud Mahomed Khán, Pughmání, who is believed to be what is called a "Suchah Syud," or, one whose pedigree is undoubted—and who has influence with some of the Sheik Ali chiefs hoped by the assistance of Syud Shah Abbas, residing at Bitchílik near Shibr, the Pir of the Sheik Alis, to procure by negotiation or purchase a passage through their territories. At the time of my leaving Bámíán, it was understood that Khán Mahomed Khán was at Ahíngur at the mouth of the valley of Tópchí. Davud Mahomed Khán at Irak and Syud Kahomed Khán at Bitchílik.

*23rd march; Bámíán to Ahíngur.* This was merely a march down the valley of Bámíán to the commencement of the valley of Tópchí, where are two castles called Ahíngur, as before noted, which we found occupied by the troops of Khán Mahomed Khán and others. As we started late from Syudabad, so it was dark before we arrived here, and as quarters were out of the question, so I was obliged to pass the night in my postín on the ground, and although the cold was severe, suffered no inconvenience.

*24th march; Ahíngur to Kálú.* About an hour after day-light, many of the troops were in motion, but the horses of Khán Mahomed Khán were not yet saddled. I however joined the promiscuous group proceeding, Burkut being to follow. We passed up the valley of Tópchí, and ascended the Kotul Huft Pylan, but in place of gaining the summit inclined to the left or east, and gained the crest of the Kotul Shúter Girdan, the descent of which is less

considerable. Naturally steep and precipitous, it was now very troublesome from the frozen snow, although the passage had been improved by the exertions of the Hazáras of Kálú. It became absolutely necessary to dismount, and with all our precautions numbers of horses lost their footing. The descent brought us into the vale of Morí, stretching from north to south. We soon made a castle called after the vale, Morí, deserted by its inhabitants and the entrance blocked up with stones. Here was a plantation of small trees, and a water mill. On the rocks on the eastern side were considerable ancient remains, constructed of burnt bricks, and remarkable for neatness and solidity. Our course up the valley was long and difficult, and we had several times to cross and recross the half frozen rivulet. The road generally led over precipices and many of the animals slipped down them, but, thanks to heaven, my little nag was sure and firm footed and passed all the dangerous spots with impunity.

It was still day when we reached Kálú, and passing under the castles occupied by Mír Zuffer and his relations, on eminences now on our right, came opposite to a kishlak on the other side of the rivulet, which had a rural bridge thrown over it. The kishlak was occupied by Shukúr Khán, Terín, with his horse jeisalchis. I waited until near dark for the arrival of Burkut, who not appearing, I was obliged to seek for quarters for the night. Shukúr Khán hearing of me, gave me into the hands of a brother of Mír Zuffer, enjoining him if he valued the Khán's good will to take charge of me. The Mír conducted me to his castle, and directed one of his people to conduct me to the Mihmán Khánu (house of guests) adjacent to it. This I found full of men and horses, the party of Syfúdín, the Khán's Shahghássí, and brother to his naib, Sadúdín. They were not willing to receive an intruder, and expressed themselves in terms of little decency or civility. I believe however they did not recognize me, and I did not take the trouble to make myself known. I now returned to the castle gate, and had reconciled myself to pass the night under its wall—when two horsemen arrived, enquiring where Shukúr Khán had taken up quarters. Seeing me, they told me to come with them—and we descended towards the Kishlak. On reaching the intervening stream, our horses, on account of the darkness, were fearful of committing themselves to it—and I believe we must have spent above an hour in unavailing beating, kicking, and goading, before we finally succeeded in making

them cross it. Shukúr Khán regaled me with a good supper and provided barley and chaff for my horse. Throughout the night a splendid fire was kept up—maintained however at the expense of the implements of husbandry belonging to the Hazáras. We were yet sitting, when Mír Zuffer's brother arrived, and showed a letter from the Khán, commanding the return of all the troops to Bámián.

*25th march; Kálú to Tópchí.* Having no alternative but to return, Shukúr Khán's party saddled their horses, and one of the men did the same for me, when it was found that my bridle and one of the saddle girths had been purloined. Shukúr Khán exhorted his men to produce the articles, and a Syud of the party stood on the roof of a house and denounced the vengeance of the prophet on whoever had taken the property of a stranger guest, but to no purpose—and I was compelled to proceed without having in my hand a guide or check to my horse. The good little animal did not allow me to suffer from the deficiency. We returned by the road we had come, and in progress I fell in with Burkut. On arrival at Tópchí, we proceeded to the first of the castles, where every house being occupied, we were compelled to select a spot for the night under the walls. Here I found Shahghássí Omed of the Khán's establishment, who interested himself to procure me a lodging. Adjacent to the castle was a house in which Dín Mahomed a Juánshír merchant with his son had fixed quarters. The Shahghássí first civilly, and, on their demurring, insisted on their receiving me as a companion. They consented, and I in return declined to avail myself of what seemed to be considered a favour. Their servants came and entreated me to join their master, on which I went and had a comfortable position assigned me. Dín Mahomed was a tea drinker and was suffering great privation, having exhausted his stock of the delectable herb. I had it in my power to give him a small supply, which put him in very good humour, and we passed a pleasant evening enlivened by the presence of our landlady a pretty lively young Tájik wife.

*26th march; Tópchí to Irák.* Shahghássí Omed perceiving my want of a bridle, produced a Hazára one not worth a dínar, which he said a friend of his was willing to sell for a rupee. I knew that the worthless bridle was his own, but considering he deserved a rupee for his attentions the preceding evening, purchased it. Just as I was going to mount, a man of Shukúr Khán's party came up and returned my own bridle, which it was feared to retain, suppos-

ing that I was returning to Bámíán and might acquaint the Khán of its loss. There was a small party of four foot jeisálchis, now mounted indeed on horses, Hazára spoil, a portion of those under command of Jummir Khán Yusefzye, and who when at Kábul, do duty at the Derwázza Shah Shéhíd of the Balla Hissar. These men claimed me as an acquaintance and attached themselves to me, as did three other men of Koh Daman, jeisálchis also but on foot. Syud Mahomed Khán Pughmání, I have before noted, had proceeded to Bitchfík, and reports reached us that his negotiations with the Sheik Ali Hazáras had succeeded. We therefore determined to proceed and join him. We passed down the valley of Tópchí, and on reaching that of Bámíán, turned to our right or east, and after no very great distance, passing a castle to the left, arrived under the ancient remains called the castle of Zohak, and crossing the rivulet of Kálú which at this point falls into the river of Bámíán, ascended the hills opposite to Zohak, the passage over which is called the Kotul of I'rák. The road was good and the ascent gradual, and the summit of the pass was a large table space, remarkable at all times for wind. We had hitherto traversed ground slightly covered with snow. The surface of the table space was however clear, the violence of the wind having dispersed whatever snow had fallen on it. On this day walking and leading my horse, the better to resist the cold, I was scarcely able to stand against the wind, which blew from the south. The north-westerners are said to be terrible in power at this spot. The table space surmounted, the descent of the Kotul commenced, which only at first a little steep, led us into a stony valley for a few hundred yards, when the open vale of I'rák was entered. We halted at the first castle that occurred; there were others in front and to our right or south, one of the latter belonging to Shah Mahomed Syud, who had been condemned in fine. About six castles were only in sight, but we were told that there were others in contiguous valleys considered as belonging to I'rák, which formed an aggregate of twenty inhabited castles. The plain was nearly free from snow, and the cultivated lands were considerable; a small rivulet irrigated the valley flowing from the south to the north, and on it were many water mills. Opposite to us in the rocks north of the valley, were many caves, occupied by the káfila from Bokhara, as the castles were by the soldiery. The inhabitants of I'rák, beheld with consternation, the ingress of so great a multitude, and were at a loss how to furnish supplies, which of

course were imperiously demanded.. In the castle in which we had sheltered ourselves, our party of nine persons, and six horses, were lodged in an apartment on the ground floor—in other apartments was a Hakumzádeh of Peshawar with a party of twenty all mounted. The Rish Seféd, or father of the family occupying the castle, through necessity, consented to provide chaff for the horses of his guests, but he was thrown into great anxiety, by the arrival of a large herd of camels, the drivers of which beavouacked behind the castle walls, and laid hands on the old mans dried clover as well as chaff. My companions installed me their Khán, the better to practise their impositions on the Hazáras, a part they judged me competent to personate, being arrayed in garments of British chintz and somewhat more respectably mounted than themselves—indeed as the Rish Seféd observed, the Khán's horse was the only one that had not been plundered from the Hazáras. I was compelled to witness, without the power of prevention, much insolence, presumption and oppression—all I could do was to conduct myself orderly and to accept nothing without giving an equivalent. I was fortunately provided with a small supply of gúr or coarse sugar in balls, the only saccharine substance to be procured at Bámíán, with a few other articles prized by Hazáras, and by making small presents which were gratifying to the receivers, I soon became a favourite.

The next day, no precise intelligence having been received by Syud Mahomed Khán Pughmání, and my companions holding good quarters, they determined to halt as did the Hakumzádeh. In the course of the day, the Khán's agent at Irák, Soynder Khán, arrived and told the Rish Seféd, that he was at liberty to eject his intruding guests, who were a set of vagabonds, roving about the country, contrary to the Khán's orders, and that the Khán had positively forbidden that any one should sell or give to them a handful of chaff or barley. The Rish Seféd observed that on my account, who was a Mússúlmán among the whole, he was contented to give lodging for the night, and chaff for the horses, but prayed that he might be relieved from the presence of the camels, that were devouring, as he expressed it, his entrails. In the apartment allotted to us, was a kúndúr or mud vessel of capacity, the mouth of which, as well as the sides, was plastered over, by sounding with their fingers, my companions found it to be full, and they determined to open it during the night and evacuate a portion of the contents. A large bag of

grain was also destined to similar treatment. During the day a Hindú from the kafila had come to the castle with a trinket which he wished to sell or exchange for necessaries. One of the jeisálchis happened to be at the gateway and took the trinket from the Hindú, under pretence of effecting its disposal; he came with it and secreted himself on a sheep crib at the extremity of the apartment, and eluded all search that the Hindú and Hazáras of the castle made for him, while his comrades were highly indignant that one of their party should be suspected of dishonesty. Two of the three foot jeisálchis of Koh Dáman were Nímazís or prayer-sayers, and one of them after repeating Nímaz Shám or evening prayer called for a mékh tavíla or iron horse pin, avowing without shame, that he was a bulít or adept at such nefarious work. He sounded the kundúr in various parts with the instrument, selecting the head as the spot to open, the operation to be postponed until midnight. Ultimately when it was supposed that the Hazáras were at repose, the unhallowed despoilers arose, lighted the lamp and first repaired to the bag which they opened by cutting the threads with which it was sewed and abstracted a quantity of grain. Being provided with large sewing needles and thread they reseeded the bag. Between our apartment and that in which the Hazáras of the castle slept, there was no intervening separation, both being as it were one apartment, one portion lying round to the right, the other to the left of the common entrance from without; hence it became a necessary but delicate matter so to manage the lamp that its light should not be seen by the Hazáras, and this was dexterously managed by the assistance of a chupun or cloak. The Kundúr was then assailed, and a quantity of, I believe, grain extracted. The aperture made was next cemented over with moist clay previously prepared, and the stolen property securely deposited in the saddle bags of the parties; they extinguished the lamp and again went to rest.

*27th march; Frák to Shibr.* My companions by times saddled their horses and prepared to start, wishing to precede the discovery of the night's theft. One of the Hazára youths, however examined the bag of grain, and exclaimed that it had been opened; the good Rísh Seféd enjoined silence on him, observing what had been done could not be helped, and addressing the jeisálchis, conjured them to behave with propriety in Shibr, where they would not find the people sugs or dogs, that it behoved them not to throw obloquy on the

Padsháh whose servants they were, and he recommended them to the divine protection. He warmly pressed my hands when I mounted and invoked on my head, a variety of blessings, as did the other inhabitants of the castle. We crossed the rivulet in front of the castle, and turning to the north passed through a defile into a small vale where were two or three castles, the water accompanying us; this conducted us into another more spacious and inclining to the northeast, where were four or five castles and two or three kishlaks, with several caves and the remains of ancient buildings on the rocks. There are also two or three Ziaruts and numerous small groves of trees. The valley was perfectly free from snow, as were in great measure the adjacent hills. It was evidently a favored spot, and the soil was so excellent, that I found tobacco was among its products. It was called Búbúlák. Its rivulet joined that of Irák in the valley we had quitted, and both augment the river of Bá-mián. Ascending the valley of Búbúlák, we passed a spring which on issuing from the rocks was sensibly warm. Above this point the valley contracts, and we began to have snow beneath our feet, the quantity increasing as we ascended. Arrived where a defile radiated to the east, which a guide we had with us, told us led to Shibr; but our party which was this day in company with the Hakumzádeh, resolving to proceed to Bitchílik, we kept straight up the valley we were in. Our guide here wished to leave us, but the Hakumzádeh would not suffer him, when a very little farther on, he took the start of us, we being embarrassed by snow and ice, and either hiding himself or passing over the rocks, was lost to us. As we proceeded up the valley, it became a mere defile, and we were grievously incommoded by the accumulated snow and ice. A rivulet in it now nearly icebound proved a serious obstacle to our progress. Eventually clearing it, we found ourselves at the southern extremity of the vale of Bitchílik, which was open but covered with snow. The vale extended from north to south, and passing some eight or ten castles and kishlaks, we arrived at the castle of Syud Sháh Abbas at its northern extremity, and at the base of the Kotul leading into the Sheik Ali districts. On one of the towers of the castle was a pole surmounted by a hand of metal, the emblem of the Syud's power and character. We found that Syud Mahomed Khán Pughmání was within the castle, to which none of us were admitted, and Dín Mahomed the Júánshír merchant was at the Mihmán Khánu under the walls. We learned that the Sheik



Ali Hazáras had refused to grant a passage through their territory, and menaced no longer to reverence Syud Shah Abbas as their Pir, who seemed desirous to introduce the Afgháns among them. They said if a passage were granted, that the Afgháns would the following year enter the country with guns and compel them to pay tribute. The Syud's brother had been first dispatched, and on his return, the Syud himself had repaired to the Hazáras, but it was hardly to be expected that he would be more successful in his mission. Our arrival was said to be unfortunate, and calculated to frustrate the negociation, and we were recommended to proceed to Shibr, which lay only a little to the south, a slight Kotul intervening. We therefore crossed the Kotul, which was not long, and rather a passage over an undulating high land than a pass, and came into the southern extremity of the vale of Shibr; ascended the vale passing several castles and kíshlaks to the right and left, and at the head of it, the Hakumzádeh and his party were provided with quarters, and we were taken up a valley extending to the south where were several castles, and among which our party was distributed, the men on foot at one castle, and the horsemen in two castles. The people were willing to consider us as guests, and to provide ourselves with food and our horses with provender, and they made a magnificent fire, continually heaping on it fresh fuel. We were regaled with a supper of fine wheaten cakes and krút. My companions having turned their eyes around the apartment to discover if there was any thing to purloin, and, there being in it two or three Kundúrs, to prevent a repetition of the scene of the preceding night, I took an opportunity of going outside, and calling the Rísh Seféd, cautioned him to make two of his young men sleep in our apartment, which step being adopted, baffled the fúrtively inclined. We sat up late this evening, some young Hazáras from the other castles having come on my account; little presents won all hearts, and the donation of two or three sheets of paper to the son of the Rísh Seféd, who was a Múlla, or able to read and write, wonderfully delighted him as it did the old gentleman his father.

*28th march; Shibr to Búbúlák.* Our landlords in the morning although they intimated the expediency of our departure, had the hospitality first to provide us with breakfast and to feed our cattle. One of the jeisálchís had proceeded to the castle below, where the Hakumzádeh had passed the night, to enquire of him how to act as we were now situated. He replied that if we thought we should

not be ejected, it would be as well to remain, otherwise there was no alternative but to shift quarters. On return of the messenger, a council of war was held by my companions, and it was decided that a removal was expedient and necessary, both as an ejection was to be apprehended, and there was a probability that the Hazáras of Sheik Ali, would be seen crowning the summit of the Kotul of Shibr, it being understood that fifteen hundred of them had assembled on the other side on hearing of the advance of the Afgháns to Shibr. The Hazáras of Shibr were more independent and fearless than those of the other districts we had visited. They said, in course of conversation that they were ryuts of the Afgháns, rather from a desire to live peaceably than from necessity. The Afgháns, they observed, might talk of their Padsháh, but they had none; Dost Mahomed Khán of Kabúl, was not a Padsháh, but a lútmar or robber. We mounted and descended the vale of Shibr which terminated in a narrow defile, which passed opened into another valley stretching from north to south, and to the left or south were some five or six castles: soon after we entered the valley which led us to Búbúlák, where we took up quarters at a kishlak, which proved to be but one house very spacious and convenient. Our presence was not altogether acceptable to the owners, two brothers, and one of them went to prefer a complaint to the Khán's agent residing at Búbúlák. This man came and after soothing the Hazáras, told my companions to get as much out of them as they could for the night, but to depart in the morning. They needed not this encouragement to assume importance, and ourselves and horses were provided with food gratuitously.

*29th march; Búbúlák to Bámian.* In the morning having first breakfasted, mounted, and passing successively the valley of Irák and its Kotul, descended into the valley of Bámian. A little beyond Zohák was a castle where my companions would fain have passed the night, but there were no others than females and children in it, the males having been sent with Raheimdat Khán and Mahomed Ali Beg to Kárzar. The women weeping and shewing much anxiety, I continued my course, and was followed by the others of the party, and urging my horse, reached Bámian, while it was yet day. Found that the Khán had removed from the castle of Syudabad to that before the colossal statues, in which he formerly resided, and where Mír Yezdánbuksh had been slain. Be-

fore reaching it, was met by my companion Sirkerder Kumber, who led me to his quarters.

We now learned that the Hazáras of Kárzar had dispatched letters to the Khan, offering to surrender the castles, if assured of indemnity for the past, by the guarantees of Raheimdat Khán and Mahomed Ali Beg. It was singular to observe these men reduced to the necessity of seeking protection from their avowed enemies, and how fortune seemed to favor the Khán's designs, by his adversaries voluntarily coming forward and relieving him from a state of embarrassment. Raheimdat Khán and Mahomed Ali Beg, had been immediately dispatched to Kárzar, and ere they reached it, it was found that Nacir Mír Ali and Kásim Khán were on the road to Bámian to pay their respects to the Khán. They arrived and were courteously received, the Khán telling Nacir Mír Ali that he had a better opinion of him for having held out the castle, than he would have, had he surrendered it on hearing of his Mír's death. Tidings of the occupation of the castles of Kárzar now reached, and the road to Kábul became open.

The Khán's two brothers Davud Mahomed Khán and Khán Mahomed Khán had before with Syud Mahomed Khán, Pughmání, taken oaths that they would not return to Bámian, and had each thrown three stones on the ground, vowing they would have no farther connection with the Khán, agreeably to an Afghán custom called "Sung talák" or "divorce by stones." Davud Mahomed Khán in observance of his oath was at Irák, and Khán Mahomed Khán, with like scruples occupied some caves below Bámian. Syud Mahomed Khan failing in his negotiations with the Sheik Ali Hazáras for a passage, returned without hesitation to Bámian; as an Afghán, considering oaths trivial matters, or, as a Syud, looking upon himself privileged to disregard them. He brought also with him the sons and brothers of Syud Sháh Abbas of Bitchílík, and introduced them to the Khan's acquaintance, which subsequently became so intimate, that the Khán imposed a fine of Rupees five thousand on the Syud, who procuring a letter from the Sirdar of Kábul in his favor, the Khán first pillaged and then demolished his castle, writing to the Sirdar that his letter unfortunately had come too late. The Syud, exaggerating possibly, estimated his loss of property at Rupees twenty-thousand. The Khán visited his brother Khán Mahomed Khán in the caves, and much urged him to remain at Bámian, the latter was inflexible, and many high words passed, and it

was finally agreed that each should no longer consider the other as a brother, and written documents to that effect were interchanged. But it was all a farce, Khán Mahomed Khán's departure was concerted, and if the Khán's designs were liable to suspicion by the Sirdar of Kábul, it was necessary that the loyalty of Khán Mahomed should not be suspected. Davud Mahomed Khán had consented to remain. I now made arrangements to accompany Khán Mahomed Khán.

*30th march; Bámian to Kábu.* It being understood that Khán Mahomed Khán would pass the night at Tópchí, I was in no great hurry to start from Bámian, and remained there until mid-day. The Khán himself took horse and had proceeded to Ahínggur, for the purpose, as was supposed, of conferring with his brothers. Davud Mahomed Khán, I knew, had been summoned from Irák. I now followed him alone, and a young man of Kábul who had engaged to attend my horse on the road, being to join at Tópchí. Passed down the valley of Bámian, and at some distance beyond the castle of Amír Mahomed Tájik, where the road borders on a precipice, was assailed by the cries of two youths cutting ghuz bushes in the valley of the river beneath. They were too distant to be intelligibly heard, but I found that they directed my attention to something below the precipice. Discovering after some trouble a path down into the bed of the valley, I found lying in agonies, and with countenances pale as death, Syud Abdúlah and his son, noticed as being inmates of the Sundúk Khánu tent in the Bísút expedition. They had obtained permission from the Khán to return to Kabúl, and he had given to them, one of the running camels brought from Sind, which carried both, and mounted on this animal, they had left Bámian to join Khán Mahomed Khán. The camel at this dangerous spot had slipped or trod falsely, and precipitated himself and riders from a height of seventy or eighty feet. The animal was killed on the spot, the men were still living, nor did I know the extent of the injury they had received. Two horsemen joined us, and I wished the Syud and his son to be conveyed to the Tájik's castle behind, but this was refused, the horseman asking, when had Tajiks become Mússúlmans? As I could not carry them myself, all to be done; was to collect their effects and place them under their heads. On reaching Ahínggur, I found the Khán sitting on an eminence south of the castles, in conversation with Davud Mahomed Khán, his Naib Sadudín, Múlla Jahan Mahomed the envoy from Sind, and Jáhándat Khán a Káker, the two latter

proceeding to Kábul. I joined the group, and although the discourse was in Pushto, was able to comprehend the general drift. The Khán advertng to the probability of Došt Mahomed Khán's displeasure or suspicions, desired Jáhándat to represent to him the important services rendered, with which if satisfied, well; if not, turning to the castles in view, he said, here I have castles, villages and gardens, and can content myself. Davud Mahomed Khán smiled, and observed, he feared the Sirdar would say that Háji had taken to his "ákbul tugghí" or his "own peculiar mode of humbugging." The Khán on rising gave me in charge to Múlla Jáhán Mahomed and Jáhándat Khán, urging their attention to me on the road, and instructing them to tell Khán Mahomed Khán, not to suffer me to incur any expence to Kábul.

In company with my new companions, we passed Tópchí when I found our destination was Kálú. We crossed the Kotul Shuter Girdán, and descended into the valley of Morí, when yet a glimmering of light remained. As we ascended it, darkness set in, and although the road was intricate and dangerous, and some of the animals sometimes slipped, we reached Kálú in safety. We repaired to the castle of Mír Zuffer's brother, who took us to the Míhmán khánu, where again was Shahghássi Syfudín and his party. They were unwilling as before to receive me, but admitted my companions, who made me over to a Hazára, telling him to conduct me to Khán Mahomed Khán. I was taken to a castle a little north, and introduced to Khán Mahomed Khán sitting by a cheerful fire in a spacious room, with some one lying by his side hidden under bed clothes. He was excessively angry with Múlla Jáhán Mahomed, for having turned me adrift at so unseasonable an hour, and said that but for his female companion (the hidden thing under the bed clothes, proved to be a Hazára kuníz or slave-girl) I should have shared his apartment. As it was, I was furnished with supper and then provided with lodging in another apartment, where were four or five horses. Although so late, chaff and barley were produced for my horse, by a brother or son of Mír Zuffer. I may observe, that as we traced the valley of Morí, we met a number of men, women, and children, Hazáras of Kálú, who had been compelled to abandon their dwellings to the Afghán soldiery, and with weepings and lamentations were proceeding, I presume, to the caves at Morí.

*31st march; Kálú to Tabur.* Early in the morning our horses were saddled, and understanding the night was to be passed at Gir-

dun Díwál, I proceeded, falling in with such horsemen as first advanced, without communicating with Khán Mahomed Khán. As we traced the vale of Kálú, the snow began to lie heavy on the soil, increasing in quantity as we neared the Kotul Ajíghuk or Ajíkhuk. The ascent of the Kotul was comparatively easy, and the road, if free from snow, is probably good: the descent is much more steep, and was now very troublesome. At the base of the Kotul on this side was a castle to the left called Ajíkhuk. We now commenced the valley of Kárzar and our road was strewn with the skeletons of the animals that had perished during the march of the Gúlám Khánu troops. After some distance reached the two castles of Kárzar one seated left of the rivulet, and the other, that built by Mír Yezdánbuksh, right of it and on the line of the road. The latter was garrisoned by Afgháns, and the former by Mahomed Ali Beg and his Séghanchis. From Kárzar the valley widens a little and afterwards expands at a place called Séh Killa (the three castles) where were indeed the number indicated of inhabited castles, and two or three ruinous ones. Hence the valley again contracts until we arrive at Síáh Sung (the black rock) where Mír Yezdánbuksh slew the Vakíl Syfúlah, the murderer of his father, who himself was also slain here; at this spot it is connected with another turning to the right which we followed. We marched until dark, and I had the mortification to learn that Khán Mahomed Khán had remained at Kárzar. I was, therefore, in a manner alone, and left to my own exertions and the favor of heaven. The horsemen in front of me, had proceeded until no vestige of a path was discernible, and as it was night they were in much perplexity. We had without knowing it arrived at the spot where the valley of Síáh Sung opens into that of the Helmund river. After much search, a path was reported leading up the eminences on our right, this was pursued and brought us on a table space, which we traversed, in hopes of finding some inhabited spot. We came upon two castles, the inmates of which manned the walls and loudly protested against our halting. The whole body of horse collected around the second castle, and as snow was falling, and our situation becoming very desperate, some of the most belligerent of the party, called upon their companions styling them the victors of Séghán and Kahmerd, and exclaimed it would be disgraceful if they could not compel the Hazáras to admit them. The gates of the castle were assailed by axes and stones but in vain, when the owner offered, if his guests quietly took up quarters under

the walls to provide them with fuel and chaff, but he peremptorily affirmed that none should be admitted within the castle; these terms were accepted. It was soon discovered that the two castles belonged to two brothers, Mahomed Shuffi Khán and Mahomed Hussan Khán, Talishes and not Hazáras, the latter was present, the former at Kábul. My condition was not much improved, having no one that I could claim as a companion, and no one willing to admit me as such. In this dilemma, I addressed myself to Mahomed Hussan Khán, who was now busy among the men in promoting their arrangements. He instantly took my hand, and put it into that of one of his servants, telling him to take me and my horse to the farther castle. Here I was comfortably lodged, had a good supper, and the sons of my landlords passed a good part of the night with me in chitchat. I found the name of the place was Tabur, and that it was part of the districts Girdun Díwál.

*32d march; Tabur to Sir Chishmeh.* In the morning retraced the road to the junction of the valley of Síah Sung with that of the Helmund river, which we crossed, the stream flowing under ice. On the eminences to our left were two or three castles and kishlaks, and in front of them were sitting numbers of Hazáras with their firelocks, not, as I imagine, for the purpose of annoying us, but of securing themselves from interruption. From the Helmund we ascended the valley leading southerly for some distance, and then another stretching easterly, which finished in an ascent rather than a Kotul, which brought us on the plain of Súrt of some extent. Here were three castles visible, much to the left of the road, the nearest one of superior construction was that of Mír Ufzil. From Súrt another ascent or slight Kotul brought us into the plain of Kírhú at the base of the Kotul Honai; the passage of this Kotul was difficult and there were few traces of a road. However we succeeded in crossing it and descended into the valley of Honai, it being still daylight. Many took up quarters at Killah Vizír, the castle of Zúlfúkar Khán, others with myself proceeded. On reaching the castle of Mustapha Khán, entrance was refused, and we went on until we reached the castles at the entrance of Sir Chishmeh, belonging to Ismail Khán Mervi. It was now night and admittance alike refused. The heroes of Kahmerd and Séghan, again had recourse to ineffectual menace and violence; the walls of the castles were manned, and some shots, probably blank ones, fired from them. The party at length contented themselves with a large stable and

musjit without the walls. I here saw no remedy but passing the night on the ground, and the best place I could find, was under the gateway of the castle. My postin was wet on the outside, as a good deal of snow had fallen during the day, but I had a large excellent nummud or felt, fastened behind my saddle, which I now trusted would avail me, but on rising from the ground where I had been sitting with my horse's bridle in my hands, found it had been cut away. While uttering fruitless denunciations against the robber, a voice from within the castle whispered to me, that if I sat a little while till the Afgháns were settled, I should be admitted. These were glad tidings, and the promise was fulfilled, the gates were opened, and myself and horse dragged in. I was led to a warm apartment, where was a sundullí, and thrusting my legs under it, was as comfortable as I could be.

*33rd march; Sir Chishmeh to Zémúnní.* In the morning an excellent breakfast of stewed fowl was provided, it having been discovered that I was a Feringhí and not a Telinghí, as had been at first supposed; and some of the ladies of Ismael Khán who proved to be in the castle, sent an apology for having lodged me the night with grooms. This was unnecessary, I was too grateful for the shelter afforded to quarrel with the company I found myself in, and desiring my thanks to be conveyed, mounted and left the castle. There arose a terrific south wind, which carried the drifting snow before it. I had never in my life witnessed any thing so violent, and until now had never formed a just conception of the effects of a wind tempest during winter in these regions. I bore up however against it, successively passing through the districts of Sir Chishmeh, Tirkhānu and Jellaiz, when my powers yielded, and I found myself becoming insensible. Fortunately at this critical moment, a village was a little right of the road, to which I turned my horse, who also had become faint. Crossed the stream of the valley by a bridge, and entered the village on its bank. Threw myself from the horse, and entered without ceremony the first house with open door. The master, who saw how things stood, recommended me to the musjit, engaging to take care of my horse. I replied, my good man, I am a Feringhí, and what have I to do with the musjit. On which he instantly led me into an upper apartment occupied by a brother. There was a sundullí, my boots were pulled off and my feet examined, which had suffered no injury. My new host, seeing a good Hazára burruk, bound round my waist,



offered to receive it in lieu of other remuneration, and to kill a sheep in the evening. I gave it to them on condition, that if the wind continued on the morrow, they should not turn me out of doors. My right eye had been affected by the snow, and became very painful towards night; after trying a variety of experiments, the pain yielded to the application of pressure.

On the morrow, the wind continuing with unabated violence, halted at Zémúnní agreeably to engagement. My landlords here, were men engaged in petty traffic with the districts of Seghán, Kahmerd, the Dusht Seféd, &c. They affirmed that they were at a castle on the Dusht Seféd, when IIájí Khán made his reconnoissance, and that had he advanced, the Tatars would have fled.

*34th march; Zémunní to Kábul.* The wind subsided; started for Kábul, and passing successively the village and castles of Zébadák on the right of the valley, and the Zearut Kwojeh Esau on the line of road, crossed the Kótul IIák Seféd, and entered the district of Urghundí. Hence having Killa Kazí and the valleys of Chahar Deh to the right, and those of Mobarek and Afshar to the left, passed through Deh Muzzung and gained the precincts of Kábul by the bridge Nassir Khán—and marching through Chandol, reached the Balla Hissar while it was yet day.

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*Anniversary Meeting. May 2nd.*

**Present.** Captain D. Ross, F. R. S. President in the chair; The Hon'ble Sir J. W. Awdry; Colonel T. Dickinson; Major O. Felix; J. Bird, Esq.; Dr. C. Motéhead; W. Henderson, Esq.; John Skinner, Esq.; J. F. Heddle, Esq., Secretary.

Members of the Committee of management for the ensuing years were elected. *Resident Members.* Major Neil Campbell; James Bird, Esq.; Captain J. Holland; A. B. Orlebar, Esq.; W. C. Bruce, Esq.; Dr. J. Burnes, K. H.; C. McLeod, Esq.; Dr. R. Brown; T. W. Henderson, Esq. *Non-Resident Members.* Colonel H. Pottin-ger; Colonel C. Ovans; Lieutenant Colonel Sir A. Burnes; Captain R. Shortrede; Captain E. P. Del'Hoste; J. Howison, Esq.; James Erskine, Esq.; Captain P. M. Melvill; Captain E. W. Hart.

The following gentlemen were elected Members of the Society: W. Howard, Esq., proposed by Dr. J. Bird, and seconded by The Hon'ble Sir J. W. Awdry; Lieutenant Colonel G. Moore proposed by Dr. J. Bird, and seconded by Colonel Dickinson; H. G. Gordon, Esq. proposed by Dr. J. Bird, and seconded by Major Felix; Lieutenant C. Montriou proposed by the President, and seconded by Colonel Dickinson.

The following Resolutions were proposed and carried:

1st. That a class of Honorary Members be instituted, for the purpose of attaching persons of distinction to this Society, as is customary in other similar institutions.

2d. That the Committee of management and other Office-Bearers who are eligible annually, be in future chosen by the general vote of the resident and non-resident Members, to whom lists for this purpose shall be forwarded three months previous to the Anniversary Meeting, at which the voting lists shall be scrutinized, and the result announced.

3d. That application be made to Government for the library belonging to the late Euphrates expedition, said to consist of a selection of valuable works on oriental Geography.

**CORRESPONDENCE.**

Read a letter from the Secretary of the Royal Geographical Society, dated 1st January 1839, intimating that Sir Robert Wil-

Horton had informed him of the Society's endeavours to procure a library, and offering his assistance in selecting and purchasing a suitable collection of Geographical books; at the same time suggesting that £100 laid out in second hand but complete works, would procure for the Society the most useful.

*Resolved*, that the President be requested to convey the thanks of the Society to Sir R. W. Horton, for his exertions in promoting the objects of the institution.

That the thanks of the Society be communicated to the Secretary of the Royal Geographical Society, Captain Washington, for his obliging offer of assistance, and that the sum suggested [£100] be immediately placed at his disposal for the purchase of books.

Read a letter from the Officiating Secretary to the Government of India presenting, by direction of the Right Honourable the Governor General, a copy of a Report on Piracy in the Sooloo Sea,\* by J. J. Blake, Esq. Commander, R. N. of H. M. Ship Larne.

A letter from the Secretary to Government presenting a paper entitled "Memoranda, the result of local knowledge of the Sutlege and Indus." By His Excellency General Sir Henry Fane, G. C. B., &c. &c. &c.

A letter from the Secretary to Government conveying the thanks of the Honourable the Governor in Council for the presentation of three hundred copies of Major ~~Locke~~'s vocabularies, which were printed at the Society's expense.

A letter from the Secretary to Government presenting a copy of a "Description of the Bay and Harbour of Kurachee with a sketch of the trade, by Lieutenant T. G. Carless, I. N."

#### PAPERS PRESENTED.

A short note on the remarkable coincidence between the language spoken by the Gypsies in England and the Hindústání; with a vocabulary containing 130 words of the Gipsy language,† &c. by R. X. Murphy, Esq.

A Journal of Travels in Afghanistan, by Nowrojee Furdoonjee, [lately attached to Sir A. Burnes mission] Communicated by Major Felix.

\* Printed in the preceding number.

† This paper was subsequently withdrawn by the author.

An account of the route between Sonmeance and Candahar, from the mouth of one of the horse dealers of Afghanistan.\* Arranged by Captain W. C. Harris of the Bombay Engineers. Communicated by Dr. Burnes, к. н.

A narrative of an excursion into the Hazaureh country,† by C. Masson, Esq.. Communicated through the President, by Colonel H. Pottinger; who at the same time presented copies of three Pali inscriptions taken by Mr. Masson, at Shábáz Ghari, a place thirty miles distant from Peshawer.

A paper by Dr. Bird on the importance of instituting enquiry respecting Eastern Africa, with reference to its geography, and the trade carried on between the coast and the interior.

The Secretary then submitted the following statement of the Society's account for the past year.

*Statement of the Bombay Geographical Society's account from 30th April 1838, to 30th April 1839.*

1839.	PAYMENTS.	Rs. as. ps.	1838.	RECEIPTS.	Rs. as. ps.
April 30	To Establishment....	776 6 1	July 31	By balance in the hands of the Treasurers at this date.....	2,450 15 0
"	Contingent Expenses	158 6 8		Amount of subscriptions received for the year 1838-39.....	1,499 0 0
"	Printing.....	746 10			
		<hr/> 1,681 6 8			
"	Balance in favor of the Society at this date	2,268 8 8			
		<hr/> Rupees 3,949 15 0			<hr/> Rupees 3,949 15 0

Bombay, 30th April 1839.

\* Printed in the preceding number.

† Printed in the present number.

# BOMBAY GEOGRAPHICAL SOCIETY.

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PROCEEDINGS  
OF THE  
BOMBAY GEOGRAPHICAL SOCIETY.

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JUNE—AUGUST, 1839.

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I. — *Report on the Landed Tenures of Bombay.* By F. Warden, Esq., B. C. S.

[Communicated by Major T. B. Jervis, F. R. S.]

Captain Dickinson in his exposition of the various tenures under which the ground within the fort of Bombay is held, has refrained "from going back to a remote period," observing that "it will perhaps be fully sufficient for the present purpose to show that the Hon'ble Company were in possession, it is difficult to say of what portion, of the fort so long back as the year 1720."

Upon an investigation of so important a nature, affecting in its result the rights and interests of so many individuals, holding so large a portion of the landed property on the Island of Bombay, we cannot, in my opinion, carry our researches to too remote a period. The validity of those rights must depend, not so much upon the terms on which it was ceded to the crown of England, and subsequently transferred to the East India Company, as upon the policy by which the administration has been governed in the assignment of lands, as an encouragement to merchants and others to establish themselves in Bombay. A comprehensive review of this nature is essential to that full consideration of the subject which its great importance demands; and to the want of such a review I attribute the doubts and uncertainties under which we at present labour, in regard to the line of conduct to be pursued towards the land holders. I will endeavour to supply the omission above noticed, and in doing so no apology will be necessary I am persuaded, for the prolixity of this report, embracing, as it does a period of upwards of one hundred and fifty years, and involving the permanent interests of the Company and of so large and so wealthy a portion of their subjects.

The earliest English records in the office, are for the years 1720, 1723-4, and 1727-8, from which period the series, with the exceptions of the years 1721-2-5 and 6, is complete. For information, however, of the state of private property prior to 1720, I have had recourse to Bruce's Annals of the East India Company from their Establishment by the Charter of Queen Elizabeth in 1600, to the union of the London and English East India Company in 1707-8, and as those Annals have been compiled from official documents, the information they afford may be considered as authentic as if drawn from any of the records now in existence in the Secretary's Office of Bombay. I have had recourse also to other works that have treated on the state of this island at the period of its cession. I, therefore, flatter myself that this report will be found to comprehend data which may be relied on to assist the Government in passing that decision upon the nature of the existing tenures, which the community is anxiously, and with no small degree of agitation, expecting.

The points upon which I propose to treat, I will for the sake of perspicuity, divide into the following heads, viz.

1st. To enquire into the state of the claims to lands by the sovereign and individuals at the period of the grant of the island to the East India Company; and to endeavour to discriminate the extent of property belonging to each up to the years 1707-8.

2d. To develop the principles on which the Government has been in the practice of leasing or granting to individuals ground, the property of the Company, within the same period; and to ascertain whether those principles have been respected or departed from by the Government at any time, with the view to discover on which tenures it was the intention of the Government to allot lands to individuals.

3d. To ascertain the light in which the grantees have been accustomed to view their allotment of lands.

4th. To review the system of taxation from the cession up to this period, tracing the several alterations or modifications which have been made, with the view of ascertaining the right possessed by the Company to increase the land tax on every description of property.

5th. To review the effect of the policy by which this island has been governed.

6th. Possessed of these data, to offer observations on Captain Dickinson's Revenue Exposition.

*Lastly.* To fix the rate at which the rent shall be fixed for the future.

*The state of landed property from the cession of the island up to 1707-8.*

This report is confined principally to a review of the landed tenures within the walls of the fort, which the survey Captain Dickinson has completed alone embraces, but it will be found to be applicable to the island generally.

By the eleventh Article of the treaty of marriage between King Charles the Second and the Infanta Catherine of Portugal, dated the 23d of June 1661, the Crown of Portugal ceded and granted to the Crown of England, the island and harbor of Bombay, in full sovereignty.

A fleet of five men-of-war, under the command of the Earl of Marlborough, with five hundred troops under Sir Abraham Shipman, appointed to be General on shore, was despatched in March 1662, with a Vice-Roy of the King of Portugal on board, authorized to deliver the ceded island and its dependencies to the King of England.

The King's fleet arrived at Bombay on the 18th of September 1662, and demanded the cession of the island and of its dependencies, conformably to the treaty between the King and the Crown of Portugal. The Portuguese Governor evaded the cession in consequence of the English Admiral interpreting the terms of the treaty to embrace Bombay and its dependencies, or the islands of Caranja and Salsette, whilst the Portuguese Viceroy construed the cession to be limited to the island of Bombay, and not to include the dependencies situated between Bombay and Bassein. After some fruitless endeavours to arrange the terms of the cession, the Earl of Marlborough returned to England, and Sir Abraham Shipman was obliged to land the troops on the island of Angedivah, twelve leagues from Goa.

Without adverting to the attempts intermediately made to obtain possession of Bombay, it is only necessary to the object of this report to state, that Sir Abraham Shipman and the greater part of the troops having died at Angedivah from want of provisions and accommodation, and from the unhealthiness of the climate, Mr. Cooke, the Secretary to Sir Abraham Shipman, to preserve his own life and the lives of the remainder of the troops, was compelled to accede to a treaty with the Viceroy of Goa, in November 1664, in such terms as he would grant. By this convention, Mr. Cooke renounced on the part of England, all pretensions to the dependencies, and accepted the cession of Bombay only, on the same terms which its Governor had proposed, on the arrival of the Earl of Marlbo

rough, with the additional article that, the Portuguese resident in Bombay should be exempted from the payment of customs, and have liberty of trade from Bandora and the other creeks of Salsette.

The King, on receiving intelligence of the manner in which Mr. Cooke had agreed to receive the island from the Viceroy of Goa, disavowed the convention as contrary to the terms of the treaty; and appointed Sir Gervase Lucas to be Governor of Bombay.

When Sir Gervase Lucas arrived at Bombay (5th November 1666) and took charge of the Government, he instituted an enquiry into the proceedings and conduct of Mr. Cooke, and found that, instead of carrying the revenues to His Majesty's account, he had extorted the sum of 12,000 Xeraphins from the inhabitants, and converted it to his own private use, which was proved by his receipts, with other acts of an improper nature.

The account which Sir Gervase Lucas subsequently transmitted, not only of the importance and value of the island, but of its exposed situation to the Mogul power on the continent, affords evidence of the improvident convention which Cooke had formed, by receiving the island from the Viceroy of Goa, *without the King's rights being ascertained, or a statement given of the extent of them, as transferred to the Crown of England.* In his letter to Lord Arlington, of the 21st March, 1666-67; Sir Gervase, amongst other things, stated that he was making every effort to increase the King's revenues, but, from the *indefinite conditions* on which Cooke had received it, *it was impracticable to ascertain which of the inhabitants were legally possessed of sufficient titles to their estates, no stipulation having been made, relative to the King's sovereignty of the soil, as some of the best estates in the island refused to pay rent, and produced titles, which could not be disputed, though believed to be fictitious.* That the island, when properly cultivated, and the rights ascertained would be very productive.

The Crown of England considering the island of Bombay as an unprofitable and chargeable possession, transferred it to the East India Company by letters Patent, dated the 27th March, 1668.

By this Charter, the King granted the port and island of Bombay to the London East India Company, in perpetuity, with all the rights; "profits and territories thereof in as full manner as the King himself possessed them, by virtue of the treaty with the King of Portugal, by which the island was ceded to His Majesty, to be held by the Company of the King, in free and common soccage as of the manor of East Greenwich, on payment of the annual rent of £10 in gold, on the 30th September in each year." The Company

were neither to sell, nor part with the island. They were empowered to entertain officers and men, as a garrison for the island; to appoint and dismiss Governors and officers; to make laws for the better Government thereof, and to exercise Martial Law in it. — All persons born in Bombay, were to be accounted natural subjects of England; and the Company were to enjoy all the privileges and powers granted by this charter, in any place they might purchase or acquire, in or near the said island.

This transfer was communicated to Sir Gervase Lucas, by a letter from the Court of Directors, accompanied with an authenticated copy of the King's grant, empowering him to deliver the island to Sir George Oxinden and the council of Surat. The Court at the same time sent a commission to Sir George Oxinden, to receive charge of the island, and to vest one of the council of Surat with the civil and military administration of it: an estimate of the revenues amounting to £2833 per annum, was also transmitted to Sir George Oxinden with directions to engage any of the King's troops, who might be disposed to enter into the Company's service, and to call in the guards of the factory of Bantam, and a proportion of the Company's serving at Fort Saint George to fill up the garrison at Bombay; and, as an encouragement, these soldiers were to be allowed half pay, on condition of *their becoming settlers on the island, and affording their labour for the cultivation of it*; and annually new settlers were to be sent from England.

With the object also of improving the cultivation of Bombay, (that the produce might be equal to the charges of the Government,) Sir George was instructed to invite such of the natives as might choose to resort to, and settle on, the island, to encourage them by taking the most moderate profits on trade, and to endeavour to open a commerce between Bombay, the Persian Gulph, and the Red Sea, for each of which one small vessel, laden with Company's Goods, was to be despatched, and powers given to the commanders, to offer to the natives at the ports at which they might touch, a free passage to Bombay, and full protection when they should arrive, to enable them to carry on their trade.

When Sir Gervase Lucas assumed the Government, he appointed Captain Henry Gary to be Deputy Governor, and this officer seems to have proceeded on the same plan as his predecessor, in *ascertaining the royal rights in the island*, and improving its revenue and trade. In the preceding season, Sir Gervase had dismissed Mr. Cooke, for having appropriated part of the revenues to his own use, and endeavoured to defraud the heir of Sir Abraham

Shipman; on the event, Mr. Cooke had gone to Goa, and placed himself under the protection of the Jesuits. On hearing of the death of Sir Gervase Lucas, which occurred on the 21st of May, 1667, Mr. Cooke claimed his right to succeed to the Government: this Mr. Gary and his Council rejected, which brought Mr. Cooke to Bandora, on the island of Salsette, where he endeavoured to assemble a force, assisted by the Jesuits, to re-establish himself in Bombay. Cooke was proclaimed a rebel and a traitor, and refused any countenance or protection from Sir George Oxinden.

These mixed transactions however, would be of inferior consequence, if the source of them could not be traced to an event which took place during the administration of Sir Gervase Lucas; at the time when Mr. Cooke acceded to the terms, upon which the Viceroy of Goa agreed to cede the island, either he had not examined *the rights to the lands held of the Crown of Portugal by the inhabitants*, or he had considered that the ascertaining of those rights would become a source of emolument to himself. *The Jesuits' College at Bandora claimed a considerable extent of land and of rights in the island*, which Sir Gervase refused to admit; on which they had recourse to force: this, the Governor conceived to be an act of treason against His Majesty's Government, and declared *the lands and rights* to be *forfeited* to the King; a decision which explains the reception and encouragement given to Mr. Cooke by the Jesuits of Bandora. Mr. Gary the Deputy Governor, therefore, proclaimed Mr. Cooke a traitor, and Sir George Oxinden refused to receive or encourage him at the factory of Surat. The whole of these parties referred the matters in dispute, by letters to the King, to the Lord Chancellor, and to the Secretary of State; and Mr. Gary determined to maintain his right to the administration of the land, till the King's pleasure should be known.

In making these communications to the King and to the Secretary of State, Mr. Gary transmitted a statement of the revenues of the island, as improved by Sir Gervase Lucas and himself; this statement is the more interesting, as it ascertains the value of the grant of Bombay to the East India Company, and is as follows:—

			Xeraphins.		
Rupees	6,438	2 13	Rent of Mazagon . . . . .	9,300	0 40
"	3,321	1 69	do. Mahim . . . . .	4,797	2 45
"	1,645	3 54	do. Parom . . . . .	2,377	1 56
"	1,203	1 20	do. Wadela . . . . .	1,738	0 40
"	547	0 40	do. Sion . . . . .	790	0 60
"	395	1 48	do. Veroly . . . . .	571	1 34
"	4,392	1 80	do. Bombaim . . . . .	6,344	2 61
"	6,611	2 16	do. Tobacco Stant or Frame . . . . .	9,555	0 0
"	1,661	2 16	Taverns . . . . .	2,400	0 0
"	12,261	2 16	The accounts of Customs . . . . .	18,000	0 0
"	12,261	2 16	do. Cocoanuts . . . . .	18,906	0 0
<hr/>			<hr/>		
"	50,740	0 88	Xeraphins . . . . .	73,870	1 18
"	801	3 58	More may be advanced . . . . .	1,129	1 62
<hr/>			<hr/>		
Rs.	51,542	0 46	Total Xeraphins . . *	75,000	0 0

Which at thirteen Xeraphins for 22s. 6d. sterling amount to £6,490 17s. 9d.

The Court, in this season, having made the requisite appointments for the administration of Bombay, framed the following general regulations, with the view of rendering the island an English Colony.

The fort, or castle, was to be enlarged and strengthened; a town was to be built on a regular plan, and to be so situated, as to be under the protection of the fort. Inhabitants, chiefly English, were to be encouraged to settle in it, and to be exempted for five years, from the payment of customs: the revenues (amounting according to Mr. Gary's estimate, to £6,490 per annum) were to be improved *without imposing any discouraging taxes*; the Protestant religion was to be favoured, but no unnecessary restraints imposed upon the inhabitants who might profess a different faith; manufacturers of all sorts of cottons and silks were to be encouraged, and looms provided for the settlers; a harbour, with docks, was to be constructed; a proportion of soldiers, with their wives and families, were annually to be sent from England; and an armed vessel, of about one hundred and eighty tons, was to be stationed at Bombay for the protection of the island and of its trade.

The orders of the Court of Directors on the subject of the claims of the Portuguese to land on the island, were to ascertain *whether the lands belonged to the Crown of Portugal or to indivi-*

\* The discrepancy between the amount and items in this statement occurs in the MS. copy presented to the Society.—S. G. S.

*duals, in 1661, the date of the cession, and that all acquisitions posterior to that date, must be held to have proceeded from an imperfect right, but, as it would be imprudent to delay strengthening the fort or building the town, the Government was authorized to purchase the lands in the immediate vicinity of the fort, provided the expense did not exceed £1500; the inhabitants were to be allowed a moderate toleration, but the claims of the Jesuits, though admissible by the Portuguese usages, were not to be held valid in an English settlement.*

Sir<sup>o</sup> George Oxinden the Governor died on the 14th of July, 1669, and was succeeded by Mr. Gerald Aungier.

President Aungier, on his arrival published the Company's Regulations for the Civil and Military administration of the island, and formed two Courts of Judicature; the inferior Court consisting of a Company's Civil officer, assisted by native officers, who were to take cognizance of all disputes under the amount of two hundred Xeraphins; and the superior Court, composed of the Deputy Governor and Council, to whom appeals were competent from the inferior Court, to take cognizance of all civil and criminal cases whatever; their decisions to be final, and without appeal, except in cases of the greatest necessity:—These Courts were to meet regularly once a week. The exemption from taxes for five years, recommended by the Court, to encourage the merchants and manufactures, Governor Aungier, without receding from the principle, modified, by continuing the old customs on the produce of the island, on cocoanuts and coir used as cordage, and on wine, arrack, opium, and tobacco; but he exempted bullion, and the goods specified in the Court's order, from all Customs, and to cover the loss of revenue imposed a port duty of one per cent. The result of this survey was, that the amount of the revenues from the lands had been overrated, *by the large proportion of them claimed and retained by the Jesuits*; but the amount of the lesser inland Customs had been underrated, because when put up to sale, they had produced £200 more in this, than in the preceding year. With regard to the projected town, the expense incurred in erecting the fort had rendered it a subject for future consideration; and *as the claims for rights to lands near the town had been numerous*, he had removed the fishermen to some distance, and intended to build the houses on the ground where their huts stood; but *it would require time to adjust the foundations of the rights to lands before houses for the settlers and merchants could be erected.*



The fortifications of Bombay were, at this period on a limited scale; the bastions and curtains of the fort towards the land had been raised to within nine feet of their intended height; but towards the sea, batteries only were erected, as bastions would be the work of the subsequent year. The services of a Mr. Horman Blake as an Engineer, were accepted, and he was appointed Engineer and Surveyor General in Bombay; his surveys were also directed to ascertain the rights to property, as well as to the works. This survey is not forthcoming.

The separate information from Bombay during the season 1673-74, consisted of what would, in modern times, be termed a statistical account of the island, specifying the division of it into the districts of Bombay and Mahim, with an account of its inhabitants, European and Native, the extent and magnitude of the fortifications, upon which one hundred pieces of cannon had already been mounted, the strength of the garrison, consisting of two companies, of two hundred men each, of which the greatest proportion were topases, and one hundred more of this force employed in the Marine; and of three companies of militia. The report proceeded to consider (in the event of peace) the practicability of rendering Bombay a seat of trade, equal to Surat, without interfering with the purchases or sales at that Presidency. It was taken as a principle, that branches of trade might be opened between Bombay and the Gulphs of Persia and Arabia, and between this island and the ports of Sevaier, and those in the Deccan; but this speculation affords only the result, that however comprehensive the views of President Aungier might be, taking the whole of the preceding details into consideration, the prospect of an enlarged commerce from Bombay was precarious, if not doubtful.

President Aungier's attention was next directed to improve the revenues of the island by the establishment of a Mint, by farming the customs, and by taking measures for the introduction of excise duties, to which the inhabitants had been accustomed, under the Portuguese Government.

As the exemption from the payments of customs for five years (or the period which had elapsed, since the island was granted by the King to the Company) expired at the close of this season, Mr. Aungier and his Council framed regulations, with the following object, viz. the carrying the amount of the revenue to the Company's account, and applying one per cent. to defray the charges of the fortifications. Under this regulation, all goods, whether imported or exported, were to be entered at the Custom house of Bombay or

Mahim, and the following rates were fixed for the principal imports and exports: all goods imported, including coir, grain, and timber, to pay two and half per cent. and one per cent. towards the fortifications, with the exception of Indian tobacco and Indian iron, which were to pay eight per cent. custom, and one per cent. towards the fortifications: all goods exported, to pay three and a half per cent. with the exception of the produce of the island, (coconuts, salt, fish, &c.) which was to pay eight per cent. custom, and one per cent. towards the fortifications. Gold, silver, jewels, pearls, bezoar stones, musk, amber, and coins of copper and tin, to be free of all Customs, either on import or export.

Mr. Bruce has omitted to mention a very important proceeding that occurred during Mr. Aungier's Government, the compact entered into between Mr. Aungier and the inhabitants regarding their estates. It must be evident from the preceding detail, that after the island had been surrendered to the English, many discontents and disputes must have arisen as to what property belonged of right to the Crown, and what to the people; besides which the lands and estates of several persons had been seized by the English. When these circumstances became known in England, orders were sent by His Majesty, and the Court of Directors, that restoration should be made to all who could, on examination of their titles, establish their right to what they claimed.

As in the examination which took place, considerable doubts arose affecting the validity of other tenures, the people were desirous that their titles should be distinctly fixed by a regulation, rather than weakened by the scrutiny; and were willing to make a pecuniary compromise, for the permanent security of their property.

An assembly of all the inhabitants interested in the questions was therefore summoned on the 1st of November, 1674, and the Governor with the members of Council and others, together with those of the Portuguese inhabitants, who had been chosen representatives of the people, consented to the terms specified in the agreement copied in No. 3.

It was stipulated that this agreement should be perpetual and irrevocable, and for the satisfaction of the inhabitants, Government promised to prevail on the Company to confirm it by a patent under their hands and seals.

It does not, however, appear that it was ever either ratified or annulled by the Court of Directors, but the frequent reference made to it, and the continued fulfilment of its stipulations, prove, that the agreement was always considered valid, and conferred every force that it could have received from their confirmation.

At this early period, therefore, were the inhabitants secured in their possessions, all who now hold property subject to the payment of what is called pension; possess it by a tenure of which the government cannot deprive them unless the land is required for building "cities, towns or fortifications," when reasonable satisfaction is to be made to the proprietors.

The unsettled state of the government had, for almost three years, obliged President Aungier to reside at Bombay, and to leave the management of the Company's interests at Surat to the council; on his return to Surat, in September 1675, the instructions which he framed, and left with the Deputy Governor and his council, afford a distinct view of the situation of affairs at Bombay. After the President had suppressed a mutiny that had broken out, and introduced regularity into the administration, he placed before the Court an account of the inhabitants of the island, consisting of the English garrison and settlers; the Portuguese who had remained after the cession, and a mixed assemblage of Hindoo, Mahomedan, and Parsee inhabitants: he next took a view of the great object of the Company to render Bombay an emporium of trade, and recommended, that the regulations which had been established for the garrison and for the English settlers, should be the general rule of the government; but, as it would be difficult to reduce the mixed classes of the other inhabitants, under those regulations, it would be proper to form them into something like the English incorporations, and to direct them to elect five persons, who were to become their representatives, to hear and prepare their different claims for the consideration of the Governor in Council; those persons to be responsible for all tumults, or disorderly conduct, of the classes of inhabitants whom they represented: by this expedient, President Aungier trusted, that general confidence would be created in the Company's government. With the object of encouraging the trade of the island, he recommended that forbearance and moderation should be observed in levying the duties of customs, rents, licenses, &c., but calculated that the revenue would amount to 10,700 Xeraphins per annum.

This year the duties were farmed, as the most profitable expedient, and excise taxes on provisions established, on the same principle as practised by the Dutch at Batavia; by which the amount of the revenues had been increased, and this system was to be followed up, as far as the circumstances of the island would permit. Of the military arrangements in contemplation, it is only necessary to notice the project to establish a militia, for the better defence of

the island. In the course of the season, the expedient was tried, and six hundred men embodied, the charges of which were defrayed by about *one hundred of the principal land owners on the island.*

The only material occurrence in the subsequent year consisted in the appointment of a Judge for the island, the embodying of a troop of horse and the encouragement directed to be given to the diamond merchants to settle at Bombay, and protection to the weavers; and such of the soldiers whose conduct had been regular, and whose term of seven years had expired were to be promoted to small civil trusts.

Mr. Aungier died on the 30th of June 1677, when the government devolved on Mr. Henry Oxinden.

The report of Mr. Oxinden on the internal circumstances of the island, stated, that the revenues from customs amounted to 30,000 Xeraphins per annum, that though the *inhabitants were numerous* (consisting of Gentoos, Mahomedans, and indeed the outcasts of all sects, who had sought protection) *they were of the poorer classes, to whom every indulgence had been shewn, in the hope of inducing the more wealthy native merchants and manufacturers to place themselves under the English government:* but the prospect of the island ultimately becoming a seat of trade was remote, from the opposite coasts being exposed to the armies of Sevajee, and from the Mogul armies being employed in the Patan wars and those in the Deccan being unable to stop his progress; that the Portuguese at Tannah and Caranja, continued to obstruct the entrance of provisions, and created every obstacle to the trade of the island. The political and commercial importance of Bombay therefore, was distant, and the difficulties of bringing it beyond its present narrow influence daily increasing, for the progress of Sevajee in countries immediately connected with it, and his alliances with Visiapore and Golconda, had enabled him almost to command the Deccan towards the Carnatic, and all the countries between it and Surat.

With the view of providing a sum equal to the civil and military charges of the government, the Court required in the year 1679-80 that all houses should be valued, and a proportionate tax imposed on each, the *uncultivated land surveyed, and let out on rent, and the marshy ground drained, and rendered fit for agriculture.*

The King, by letters patent, dated 9th August 1683, authorized the Company to exercise Admiralty jurisdiction in the countries within their limits: the object of this grant was to enable them to seize and condemn the ships of the interlopers: for this purpose, the President was appointed Judge Advocate, pro-tempore, to take

cognizance of all naval cases; these powers were given to the President and Council of Surat, to resist encroachments on the Company's privileges, at the time when the ships and cargoes of the interlopers had been detained in England, and prosecutions instituted against the owners and commanders.

This authority to the President and Council of Surat was, however, temporary only, that they might be enabled to seize the goods of the interlopers and allow the parties to recover, by suits in chancery, in England; for by a commission from the King, dated 6th February 1683-4; and from the Court dated 7th April 1684, Dr. John St. John was appointed Judge of the Court of Admiralty to be erected in the East Indies, and to have cognizance of all Admiralty cases within the Company's limits. This Court was to be held at Bombay, as being a possession acquired by the Crown, and, by it, vested in the Company, in full property. It was to consist of the Judge, and two merchants, Company's servants: the Judge was to have a salary of £200 per annum, and allowances at the Company's table; he was to take cognizance of, and to try, examine and decide on, all cases regarding the interlopers or private merchants, who might attempt, contrary to the King's orders, and in violation of the Company's exclusive privileges, to trade, or establish factories, in the countries within their limits: all the processes were to be in English, and not in Latin, and a table of fees to be framed, to prevent arbitrary charges on the King's subjects, or the natives of India.

The capture of Bantam by the Dutch, led to the declaration of the Court, that, in future, they would consider Bombay as an independent English settlement, and the seat of the power and trade of the English nation in the East Indies, a resolution which was incompatible with the retrenchments, civil and military, ordered in the two last seasons.

The revolution at Bantam had induced His Majesty and the Court to send out a naval and military force, the object of which was to oblige the Native powers to conform to subsisting treaties, and to assist in the restoration of the King of Bantam who had been dethroned by his son, instigated by the Dutch: when this service should be effected, the soldiers embarked for that purpose, were to proceed to Bombay, and to form the third company on the military establishment of that island. Forty recruits also, were sent to complete the two established companies, and the fortifications were ordered to be strengthened; and to add to the effective force of the garrison, two companies of Rajpoots, of one hundred men each,

were to be embodied and the men selected from the countries not subject to the Mogul, to Sambajee or to the Portuguese, to be commanded by officers of their own cast, to use their own arms, and to have a weekly pay, half in rice and half in money, and when on duty, to be blended with the regular English troops.

To defray the charges of this enlarged establishment, taking the Dutch at Batavia as an example, and proceeding on the practice at St. Helena, a duty of half a dollar was ordered to be levied on all ships anchoring in the harbour, (the Company's ships not excepted) a duty on all fishing boats, of one rupee each, per annum, whether those of the island or those of the Portuguese at Tannah to counteract their exactions; *and one rupee per annum on each shop-keeper on the island*; an exception, however, was made of the ships and boats of the subjects of the Mogul and of Sambajee, to prevent disputes with these powers.

With these sources of revenue, the Deputy Governor and Council, were to endeavour to liquidate the debts incurred on the dead stock, estimated at so large a sum as £300,000, that the revenues and debts might balance each other.

The orders of the Court to the President and Council of Bombay, for the internal administration of the island, were equally precise; as the Company had been vested with authority to exercise Admiralty jurisdiction and Martial Law, the Court resolved to bring to justice any of their commanders who might be guilty of disobedience, or refuse to act against their enemies, whether European interlopers, or Dutch or Portuguese rivals; and the President was ordered to enforce strict discipline in the troops, either regular or militia, that the force on the island might be adequate to its defence against any enemy.

To defray the charges of this naval and military force, the Customs on all goods were increased to five per cent, and the President and Council were in future to observe such orders as they might receive from the Secret Committee, appointed for the purpose of rendering the orders of the Court less known to their domestic or foreign enemies: in all treaties with the country powers, it was to be a preliminary that they should deliver up all English subjects in the territories, without reserve (whether they were Company's servants or not) to the respective Presidencies or factories, which might demand them.

With the object, therefore of rendering Bombay an efficient re-gency and seat of trade, and to enable it to protect the agency left to keep up the commercial relations between Surat and Bombay,

it was ordered, that a dry dock should be built, and a duty of one dollar per ton levied on every ship that might be repaired at it, that a wharf and pier should be erected, for loading and unloading vessels, and rates established, to be paid on landing or shipping goods: that, to make the revenues balance the charges, a progressive duty should be imposed, *of from one shilling to two shillings and six pence, on every house in Bombay*: that the English inhabitants, not in the Company's service, should be liable to a duty of consulage; that a Post Office should be established, and reasonable rates for letters imposed, either in the island, or sent and received in the Company's commercial stations; that an Insurance Office should be constituted, on the same principle as that at Fort Saint George; that the fortifications should be increased and the garrison strengthened, by recalling all Europeans who might be in the service of the native powers, and offering to such men encouragement to engage in the Company's military service, because from having constitutions habituated to the climate, they would be of more use, than recruits brought from Europe, "one seasoned man being worth two fresh ones."

At the commencement of the year, the Siddee's fleet and army invaded Bombay, and got possession of Mahim, Mazagon, and Sion, and the Governor and his garrison, were besieged in the town and castle, and unable to take any measures for carrying into execution the orders of the Court for the improvement of the island, and it was not till the 6th May 1690, that orders were sent, from the Governor of Surat to the Siddee, to evacuate Bombay, or till the 22d June, that he quitted the island, and the English again took possession of Mazagon, Mahim, and Sion.

During these public transactions, it was impossible the measures recommended by the Court, for improving the revenue of the island, could be carried into effect. The natives it was found, would not undertake the coining of money, or managing of the mint, as it had been supposed they would; and during the period of actual or threatened invasion, the revenues from lands or houses could not be collected, or the projects of establishing a Post Office, or Insurance Office attempted; hence it was impossible to raise a revenue equal to the Company's estimate, which had erroneously been adopted, in imitation of the Dutch, without reflecting that what had been practicable in old establishments could not apply to Bombay, as yet only held by the Company for a short time, and, during that period, exposed to the insubordination of the garrison and inhabitants, and to opposition by the Portuguese occupying the

stations from which supplies could be brought to the island, or liable to perpetual alarms of invasion, by the contending powers on the neighbouring continent of India.

After explaining the general circumstances of Bombay, the Deputy Governor and Council reported that the *Jesuits* on the island had been active during the invasion of the *Siddee*, in promoting his views, and therefore that they had seized on all the lands owned or occupied by them, but had deferred any final decision on this subject, till the arrival of the President from Surat, who would judge of the claims of those people, and restore their lands to such of them as could exculpate themselves, or confirm the right of the Company to such portions as had been the property of the guilty. This measure, however expedient, it was feared, might induce the Portuguese to attack the island; but, it was kept in as good a state of defence as was practicable.

As the revenues were essential to the maintenance of their civil and military servants, and the preservation of the trade, the Court directed that they should be improved, by every practicable means, and explained that the measure of confiscating the lands of those who had deserted them during the invasion of the island, had already been justified by the precedent of Signior de Tavora, which had been decided by Charles II. and the Privy Council, twenty years before the case occurred; but desired that the lands might be restored to such of the claimants as might be found innocent.

This resolution appears to have originated in the conduct of the Portuguese inhabitants of Bombay, who during the Dutch war, and that with the Mogul, refused to assist in the defence of the island, and claimed exemption from military service: in this claim they were supported by the Portuguese Envoy in London, who presented a memorial in their favour to the King, founded on rights under the former Portuguese dominion at Bombay. In answer to this memorial, the Governor and Committees of the London East India Company stated, that the inhabitants of the island of Bombay while they were subject to the King of Portugal, paid one-fourth part of the profits of their lands, as a quit-rent, which President Aungier, soon after the island came into the possession of the Company, commuted for a quit-rent of twenty thousand Xeraphins per annum, reserving to the Company, as representing the King, the right to the military services under which the lands were held of the Crown of Portugal: that during the late war with the Mogul, not only the payment of this quit-rent had been refused, but the right to the military services denied, and, during hostilities, the Portuguese in-



habitants, had by refusing military aids, forfeited the rights to their lands, though it was admitted that they, by the cession of the island to England, had become subjects of the king, to whom, by their tenures, they were bound to afford military services, either personally or by substitute, more particularly in cases of invasion, and that the lands held by ecclesiastics were equally bound to furnish military service, either by the possessors, or by their substitutes. If therefore, it was considered, that the island, since being granted to the Company, had required for its defence, by fortifications and by garrisons so large a sum as £400,000, particularly during the wars between the Mogul and the Hindoos, this claim of exemption from such service was unreasonable, more particularly when the practice of the native inhabitants of Madras and of all the other English, Dutch, French, and Danish colonies in India could be adduced as evidence, that such services were admitted and general.

The Court next approved the retaining the *Gentoo soldiers* in their service, and assigning them portions of lands for their maintenance: they were also to be allowed half pay, but in this case, the Company were to receive half the produce of their lands; a regulation the more expedient, from the difficulty of finding a sufficient number of recruits in England to strengthen the garrison.

Sir John Gayer, appointed Governor of Bombay, on his arrival on the 17th May, 1694, found the Company's government and trade in a miserable condition, for the revenue had been reduced from 62,500 to 17,000 Xeraphins, and the principal source of it, or the cocoanut trees, from being totally neglected had yielded a small sum only: the orders of the Court, respecting the forfeited estates had been obeyed and the lands restored to the proprietors, who had not actually assisted the Siddee in his invasion, on condition of paying one-fourth part of the produce, for the first year as a fine. Sir John, however, determined to make Bombay the centre of the English trade in the West of India.

No further information is traceable from Bruce's Annals regarding the revenues or the nature of the landed tenures of Bombay. These details are however sufficient to lead to these important conclusions.

That the King's rights having been omitted to be defined, from the indefinite conditions on which the island was taken possession of, it was impracticable to ascertain which of the inhabitants were legally possessed of sufficient titles to their estates, no stipulation having been made relative to the King's sovereignty of the soil; that some of the best estates refused to pay rent and produced titles which could not be disputed, though believed to be fictitious, that the

Jesuits College at Badora claimed a considerable extent of land and of rights in the island, that the claims of lands near the town had been numerous, but that it would require time to adjust the foundations of those rights before houses for the settlers and merchants could be erected: that the fishermen's huts were removed from the town and houses built on their site for the settlers, that discontents and disputes having arisen as to what property belonged of right to the Crown and what to the people, Governor Aungier entered into the convention of 1674, which appears to have allayed those apprehensions, by recognizing the whole of the lands in a state of cultivation to be private property, reserving however to the Company the right to the military services under which the lands were held of the Crown of Portugal.

It does not appear that from the date of Aungier's convention to the year 1707-8, the lands were allotted to the new settlers under any specific leases. Within that period of thirty-three years, the population must have increased, and Crown lands been proportionably assigned for their accommodation, but we are ignorant of their extent and the terms on which they were leased out, or whether they paid any rent; but I am inclined to think not, and that until 1718, the new tenants held their lands as feuds at the will of the lord, under an implied engagement to afford military service when required, and that, in that year a money rent was substituted, as will be hereafter more particularly noticed.

Although no satisfactory result can at this distant period be drawn from an attempt to ascertain the precise extent of the lands belonging to individuals and to the sovereignty respectively, at the date of Aungier's agreement, I have yet deemed it proper to enter upon an enquiry. The statistical survey of the island noticed in the 25th paragraph would at once have solved the difficulty; but as it is not within our reach, we must have recourse to other evidence, and though it is utterly impossible to define, we shall yet be able to form a pretty accurate conception of, the extent of the property belonging to the public at that period.

To judge from the small amount of the compromise including the quit-rent, one would conclude that a very small part of the island was in a state of cultivation at the date of Aungier's convention, even admitting that the estates were considerably undervalued, of which I entertain not a doubt. This conclusion derives support from the smallness of the population at the period of the cession, which did not exceed ten thousand souls, and is further confirmed by the small amount of the revenues derivable from tobacco and

spirituous liquors.\* I entertain, however, no doubt, that the whole of that population resided where they could be best protected, near the castle of Bombay, the forts of Mahim and Mazagon.

I annex to this report an extract from the travels of Doctor Fryer, begun in 1672 and finished in 1681; which affords a very minute description of the island at that period. Fryer also states that in making over the island to us; it was stipulated that the royalties should belong to the King; but every particular man's estate to the right owner; that on Cooke's landing in Bombay in 1664, "he found a pretty well seated, but ill fortified house; four brass guns,\* being the whole defence of the island, unless a few chambers housed in small towers convenient places to scour the Malabars who were accustomed to seize cattle and depopulate whole villages by their outrages. About the house was a delicate garden voiced to be the pleasantest in India; intended rather for wanton dalliance, love's artillery, than to make resistance against an invading foe." Such was Bombay Castle in the time of the Portuguese; "the walks which were before covered with nature's verdant awnings and lightly pressed by soft delights," were, on Fryer's arrival, open to the sun and loaded with the hardy common. "Bowers dedicated to ease, were turned into bold ramparts, &c. &c., within the fort were mounted 120 pieces of ordnance, and in other convenient stands 20 more, besides 60 field pieces ready in their carriages to attend the Militia and Bandaries, &c. &c. At a distance enough (from the fort) lies the town, in which confusedly live the English, Portuguese, Topazes, Gentoos, Moors, Cooly, Christians, most fishermen. *It is a full mile in length*, the houses are low, and thatched with oleas of the cocoa trees, all but a few the Portugals left, and *some few the Company have built*. The Custom-house, and warehouses are tiled or plastered, and instead of glass, use panes of oyster shells for their windows, there is also a reasonable handsome bazar, at the end of the town, looking into the field, where cows and buffaloes graze. The Portugals have a pretty house and church, with orchards of Indian fruit adjoining. The English have only a burying place called Mendam's point, from the first man's name there interred, where are some few tombs that make a pretty show at entering the haven, but neither church or hospital, both which are mightily desired. On the backside of the towns of Bombaim and Mayin, are woods of cocoas (under which inhabit the Bandaries those that prune and cultivate them) these *Hortoes\** being the great-

\* Oarts.

*est* purchase and *estates in the island*. For some miles together, till the sea break in between them, over against which up the bay a mile, lies Masse Goung, a *great fishing town*, peculiarly notable for a fish called bumbolo, the sustenance of the poorer sort who live on them and batty, &c. The ground between this and the great breach is *well ploughed* and bears good batty. Here the Portugals have another church and religious house belonging to the Franciscans. Beyond it is Parell, where they have another church\* and demesnes belonging to the Jesuits, to which appertains Siam (Sion) manufed by columbeens, husbandmen, where live the Frasses or porters also, &c. &c., under these esplands, the washes of the sea produce a lunary tribute of salt, left in pans or pits made on purpose at spring tides for the overflowing; and when they are full are incrustated by the heat of the sun. In the middle between Parell, Mayin, Siam, and Bombaim is an hollow, wherein is received a breach running at three several places, which drowns 40,000 *acres of good land*, yielding nothing else but samphire, athwart which from Parell to Mayin are the ruins of a stone causeway made by pennances. At Mayin the Portugals have another complete church and house; the English a pretty custom-house and guard house; the Moors also a tomb in great veneration for a peer or prophet, &c. &c. At Salvesong the Francisoans enjoy another church and convent; *this side is all covered with trees of cocoes, jaukes, and mangoes*; in the middle lies Verulee (Worlee) where the English have a watch. On the other side of the great inlet to the sea is a great point abutting against Old Woman's Island and is called Malabar hill, a rocky woody mountain, yet sends forth long grass. A top of all is a Parsy tomb lately raised, on its declivity towards the sea, the remains of a stupendous pagod, near a tank of fresh water, which the Malabar visited it mostly for: thus we have compleated our rounds, being in circumference twenty miles, the length eight, taking Old Woman's island, which is a little low barren island of no other profit, but to keep the Company's antelopes, and other beasts of delight."

Fryer makes the population equal to 60,000 souls, "more by 50,000 than the Portugals ever had; a mixture of most of the neighbouring countries, most of them fugitives and vagabonds."

The correctness of the picture thus drawn of Bombay in the year 1671, must strike every one who examines it at this period. We find the inhabitants resorting to those fortified places where

\* The present Parell House.

they could be best protected, and at the same time carry on their trades as fishermen, merchants, &c., near the castle, at Mazagon, and Mahim.

In respect to the extent of private property at that period, it appears more than probable from the description: "that, at a distance enough from the fort lies a town *full a mile in length*; there is a reasonable handsome bazar at the end of the town, at the backside of which are woods of cocoas being the greatest estates on the island," the whole space within the walls of the fort was such, with the exception of the custom house, warehouses, and the few houses built by the Company. The space at the end of the town looking into the field where cows and buffaloes graze, I also consider as private property, the Foras ground probably dependent on the cultivated portion, inclusive of course of the house and church, and orchards belonging to the Portugals. "The woods situated in the rear of the towns of Bombay and Mahim *for some miles together*," must have been private property; as also the ground between Mazagon and the great breach, represented as being "well ploughed and bearing good batty." Parell and its demesnes belonged to the Jesuits, including Sion to which it appertained. The side where Salvesong is situated, "all covered with trees of cocoa, jaukes, and mangoes" must also have been private property, inclusive of "the lands held by ecclesiastics." Fryer's Historical Account of Bombay certainly represents a greater portion of the island to have been in a state of cultivation than one would suppose from the amount of the quit-rent stipulated for by Aungier's agreements.

In regard to the Crown lands we are left entirely in the dark, with the exception of the 40,000 acres of good land covered by the sea, Malabar hill, and Old Woman's Island; but even supposing that more than a moiety of the island was in a barren state, and consequently public property at the period of the cession, a considerable portion must have been alienated under the operation of the orders of the Hon'ble Court to invite strangers to settle on the island; to let the uncultivated land out on rent; to assign portions of land to Gentoo soldiers for their maintenance, the Company receiving half the produce. The lands, however, belonging to the Jesuits to "a considerable extent," situated at Parell and its vicinity including Sion, became the Company's by forfeit, with the estates belonging to those who aided the Siddee in the invasion of the island, but some of the lands were restored to such of the claimants as were proved to be innocent.

Rama Camatee's property was also forfeited to the Company at

the commencement of the last century, and the result of the proclamation issued on the 5th July 1720, in consequence of the Portuguese obstructing the communication between Mahim and Bandora, and stopping our pattamars, requiring all persons who lived in other parts, and had estates in the island to repair hither with their arms in the term of twenty-one days, on pain of having their estates confiscated, must have thrown some property into the possession of the Company; for on the expiration of the limited time, none of the absentees appearing, the Verindores were on the 30th of July, ordered to enter upon and receive the produce of their estates; and those who had demands on such estates were referred to the Chief Justice of the Court of Judicature. But we have no particular account of these forfeitures, nor whether any of them were within the walls of the fort, except\* Rama Camatee's which would appear to have been situated within these limits.

Though I am of opinion that, on the conclusion of Aungier's agreement by much the greater part of the present limits of the fort was private property, I am at the same time inclined to think that, in the progress of constructing the fortifications, that property became the Company's by purchases and exchanges; but not at the early period conjectured by Captain Dickinson. The orders of the Court in 1669-70 to purchase the lands in the immediate vicinity of the fort, provided the expence did not exceed £1500, for which no small extent of ground could have been purchased in those days; the further instructions of the Court in 1709-10 to cut down the *cocoanuts* and *toddy trees* for the space of a mile from the fort; and the exchanges which Government subsequently effected up to 1745, in which year alone the value of the property acquired by the Company within the walls and on the esplanade amounted to Rs. 20,169 are strongly corroborative of that conclusion.

This attempt to define what was private and public property preponderates I think in favour of the former, as far as respects the limits under consideration. The inhabitants and merchants would not have voluntarily agreed; as they did in the year 1716, to pay an additional duty of two per cent. towards fortifying the town of Bombay; nor would the landholders have agreed to pay a tax sufficient to complete one bastion, to be raised in a term of years, if their property had not been at that period situated within the space intended to be thus secured.

\* This property was sold on the 25th of August 1786, to Hurjeram Surput for Rs. 22600.

Admitting however, for the sake of argument, that the whole of the lands of Bombay appertained of right to the Crown, either at the date of Aungier's convention, in 1720, or even at any later period, still I am of opinion that the mode in which the Government has been in the practice of permitting individuals to occupy ground, or in other words that the custom of the manor, has, upon every principle of equity, converted the public into private property, base into copy hold tenures, and that the Company have forfeited whatever right they might have possessed to resume lands, or to alter the tenure which custom has established.

This leads me to the second head of enquiry. To develop the principles on which the Government has been in the practice of leasing to individuals ground the property of the Company; and to ascertain whether those principles have been respected or departed from by the Government at any time, with the view to discover on what tenures it was the intention of the Government to allot lands to individuals.

It has already been shewn that the island is held by the Company of the king in free and common soccage as of the manor of East Greenwich, on the payment of an annual rent of £10 in gold on the 30th of September in each year. I am inclined to think that the intention of the Government has been to grant lands to individuals upon the same tenures.

Though Aungier's agreement fixed the amount of the quit-rent payable to the sovereign, still the right to the personal services of the tenant was not commuted by that convention, but expressly recognized and reserved. Those services must, however, have been subsequently redeemed, for it appears by a letter from the Court of Directors of the 5th of April 1715, that "the Verindores entered into an agreement to excuse themselves from finding trained bands or militia in consideration of fifteen thousand Xeraphins a year, and though the Court called on the Government to report if that was a sufficient equivalent, and if it altered the ancient constitution of the island in such a manner as to prejudice the Company's interest, and whether under that agreement they thought themselves absolutely discharged from assisting in case of an invasion by an enemy." I have failed to trace any elucidation of that important question, or that any payments were ever made under that agreement. I should conclude not, as some traces of the payment would have existed at this period.

The ancient constitution of the island was feudal; and the lord could claim the military services of the tenants, until the year 1718,

when the rent services may be considered to have been substituted by a tax having been imposed "on *all the inhabitants residing within the town walls* in order to reimburse the right Hon'ble Company some part of the great expence and charge they had been at in fortifying and securing the said town."

This tax was no doubt imposed in pursuance of the orders conveyed in the 64th paragraph of the Court's despatch of the 21st of February 1717, when they "reminded the Government of its promise to improve the ground rent within the city wall by letting leases *renewable or by fines or quit-rent or whatever way* Government should judge most for the Company's interest; the consideration of their prodigious charge and the peoples protection and liberty are very cogent arguments, if rightly managed, to convince every one why *that ground* ought to be valued higher than it otherwise would."

I consider the imposition of the tax in 1718, to have changed the ancient constitution of the island, and that the military services of the tenants were commuted by a quit-rent.

In 1731 an appearance of regularity and vigilance in the lords of the manor, for the first time, manifests itself. On the 3d of December of that year a "mensuration of the ground within the town walls occupied by the English as well as black inhabitants made by a Committee of the Board, with the assistance of Captain William Saunderson clerk of the works, and Ramjee and Rowjee Purvoes, by order of council was laid upon the table, with a calculate of *quit-rent and ground rent which was, and has been hitherto paid in a manner entirely unascertained*, whereby some people have been prejudiced and others favoured. To prevent which abuse in future, it was resolved that all persons that have a mind to build apply to the land paymaster and signify to him in what part of the town, and what sort of a house they design to build; and on the paymaster's being satisfied that the spot of ground they have pitched upon, is a proper situation for such a house, he is to grant them his licence for building, receiving as fees for the same, two rupees and no more; provided the said house is built with stone and mortar and covered with tiles; and for such houses as are covered with *cajans* one rupee, and upon any of the inhabitants applying to the Secretary for a lease or certificate to ascertain their title to the house to be built by licence of the paymaster, he is to grant them such a lease or certificate for the same on paying one rupee and no more."

On the 18th of May 1733, an attempt was made to introduce leases for years. I annex an extract from the records. "It being



found by experience that little regard has been paid by the inhabitants, within and without the walls, to an order of council made the 3d December 1731, directing that *ALL persons who HAVE houses, or may hereafter have any, should apply to the Secretary for a regular lease of the said house or houses paying him one rupee as his fee for drawing out the said lease; it is agreed that we order a publication to be made enforcing the said order, under penalty of dispossessing all such persons as shall not produce an authentic lease signed by the Secretary in six months from the date of the said publication, ascertaining their right to the said house or houses, and the ground they are built on:*" and it was on this occasion agreed that the Secretary "in framing such leases grant a term of forty-one years, renewable on the party's paying a fine of half a years' rent of the said house or teneiment, according as the same shall be valued by the second in council and the collector of the revenues for the time being, and the possessor."

Here we have an instance of one of those vigorous measures of Government to which so much importance is attached. A proclamation is issued requiring all the inhabitants indiscriminately, those whose estates were secured under Aungier's convention not excepted, to apply on pain of forfeiture of their property if they refuse, for regular leases, which were to be granted for forty-one years, renewable on the payment of a fine. What did this proclamation produce? nothing. for, on the expiration of the six months, we do not find that any application for leases were prepared or that any forfeitures were declared. Was it to be expected, that tenants who had obtained possession according to the custom of the manor, would have taken out leases for forty-one years for lands which had descended in the family for upwards of half a century? Probably the Government may have issued that proclamation without a thorough understanding of the nature of the landed tenures on the island.

Since the conclusion of Aungier's convention the lands have not been allotted upon any established system. I have been unable to trace that up to the year 1731, a single square yard of the Crown lands has been leased on conditions clearly descriptive of the nature of the tenure or of the intentions of the parties. In contemplating the lamentable state to which the island was reduced in the year 1717-18 measures of encouragement could alone restore and increase its population, and establish its prosperity; and so late even as 1731, the resolution of the 3d of November of that year will "show the intention of Government to have been to invite settlers

on the principle of granting them land on a low fixed quit-rent in perpetuity." If the intention of the Government was to fix the quit-rent in perpetuity, their acts have been at variance with that intention.

Adverting in the next place to the proceeding of 1739, which led to the construction of the ditch around the walls of the fort which was in a most untenable condition, we find "that the principal merchants of the place, convinced of the necessity of putting the town in some state of defence subscribed the sum of thirty thousand Rupees towards the expense of this work, which was as much as could have been expected from that body considering the low declined state of trade;"\* apprehensions were at this period entertained of an attack from the Mahrattas, who had subdued the neighbouring country and threatened the invasion of the island.

Upon this occasion the Government remarked on "the irregular practice had obtained of planting trees and building houses *through the permission or connivance* of the Government within the distance prescribed for the safety of all regular fortifications, against which the necessary precaution having hitherto been entirely disregarded, it behoved the board to come to such a resolution as may effectually prevent this evil in future, and obviate such irregularities and inconveniences as have arisen from want of a proper control in the buildings, works, and plantation of trees both *within* and without the walls. The following order was published :

"That no houses be made, or rebuilt nor any trees planted within the distance of four hundred yards from the town walls nor any houses erected within the said walls, until the ground be surveyed by the Engineer for the time being, and by him to be recommended to the land paymaster for his approbation and leave."

By this regulation, which has been and is strictly attended to, no person could repair or build within the walls of the fort without the permission of the Government, or of its officers, who it is to be presumed would not grant that permission upon Crown lands without authority; or without observing the rule prescribed in 1731, or in 1733, viz., "that upon any of the inhabitants applying for a lease or certificate, the Secretary in framing such leases was to grant one generally or for a term of forty years, renewable on the party's paying a fine of half a year's rent of the said house or tenement,

\* In order to raise that sum one per cent. was levied additionally upon the trade, which was subject to pay two per cent. contribution to the town wall until the amount be cleared.

according as the same shall be valued by the second in council and the Collector of the revenues for the time being and the possessor."

The result of these proceedings then prove that between the years 1731 and 1733, two descriptions of leases were established and must have been granted, to what extent it is needless to trace, because the resolution of the Government to introduce leases for years renewable on the payment of a fine has entirely failed; leases having been granted conformably to the rule established in 1731, and which is to this hour considered to be in force in the Collector's office.

On the 22d of March 1754 another proclamation was issued, directing that the name of every person purchasing a house within the walls, be entered in the Collector's office, before he enters on the premises. The reason of this is, however, explained, as it was difficult to recover the ground rent or to know the real measure of each house, few of the present possessors names agreeing with the rent roll.

A variety of other measures of a similar nature were pursued by the Government to ascertain and preserve the rights of the public. It is needless to quote them. I will admit that the Government has been in the practice of promulgating those notifications and proclamations annually, and denouncing the severest and the most arbitrary penalties on all those who failed to obey them. What good effects have they produced? none whatever; we are as much in ignorance of the royal rights on the island in 1814, as our forefathers were two hundred years ago.

Not only would these facts, as it appears to me, make directly against the Company, and in favour of individuals, but the acts of the Government or of its official servants can be adduced as positive evidence against them.

Let us estimate the merits of this important question on the basis of those proceedings of Government which have recently occurred, and which must be in the recollection of us all. Let us first review the proceedings of the late Town committee, appointed when the great fire in 1803, occurred, to investigate the nature of the tenures within the Town, when the question underwent the fullest discussion.

The Town Committee were directed to ascertain the right of possession or property in the tract laid waste by the conflagration. They were furnished with statements from the Collector's registry of the two descriptions of ground, public and private, affected by that calamity.

By a statement of the latter description of property in which the

names of the proprietors are given, it appears that 29,880½ square yards had been laid waste, which, at the rate of 6 reas the square yard, paid Rupees 448. ,, 28 to the Company, besides the Pension, of the other 45,867. 3, square yards were laid waste, of which the rent at eleven reas the square yard, amounted to rupees 1,234. 2 59.

The plan for rebuilding the Town having been determined on, and attained a state of advanced progress which had excited the attention of the natives, the most wealthy individuals among them, formed a combination to resist, by legal process, any mode of lining out the new streets which should tend to intersect their old foundations, or to prevent their rebuilding on them; under these circumstances the opinion of counsel was required, "whether Government might under all the inducements for the future security of the fortress which had led to the course of conduct objected to by the natives, proceed in carrying the same into execution without risk of incurring material expence in pecuniary compensations to the inhabitants, who might prosecute; or whether he considered the said inhabitants to be at all events entitled to rebuild on their old foundations, and thus debar the Government from the adoption of those measures which were deemed essential to the security of the garrison."

Mr. Thriepland continued to think that the ground occupied by those who paid assessment was at the disposal of the Government, and that no opposition from Proprietors of this description, need be regarded, farther than that they had an undoubted right to be indemnified for any outlay they might have made either of permanent utility to the soil, or from which their successors therein can derive advantage &c. &c.

The Town Committee expressed a decided opinion that the plan should be adhered to, and pursued with firmness, vigour and expedition; they were aware that many instances of resistance would occur, but they pledged themselves to exert all their diligence, and to apply a remedy for every difficulty, expressing a hope that when the intentions of Government should be once promulgated, as an absolute determination, many of the supposed obstacles would disappear, and a conviction be established in the minds of the inhabitants that their convenience and the public security were the grand and only points which the proposed arrangements were intended to embrace.

It appeared, however, to the Committee on further consideration that the obvious and liberal line of policy to be adopted by the Company was this, let the division of the new allotment be made among the pensioned proprietors agreeably to the extent of their former

possessions as near as circumstances would admit, and those who desire more can purchase from others who may be inclined to relinquish their dwellings within the walls; as this might be reckoned an indulgence, they should be satisfied even with a deficiency (if such should arise) of a few feet, and their apparent title to compensation could only be for such deficit; but, if on the other hand this class of proprietors insisted on a high value for the ground it might be objected,

1st. That\* under the deed they are only entitled to abatement of pension.

2d. If an equitable principle is adopted, the value may be referred to a sworn Committee, two to be European and two Natives.

When the pensioned proprietors are thus satisfied, the Company may put up the remaining space to be built to public sale, in such lots as might be best adopted for the convenience of every description of purchasers, and divide the proceeds among the assessed proprietors, in full of all their claims; allowing them, in the meantime, to withdraw the materials remaining of their houses; thus the Company appropriate every part of the ground to the former possessors agreeably to their right, and neither claim nor derive any benefit from it.

The Committee explained, on this occasion, that the indulgence proposed to be granted to the assessed proprietors should be understood to arise from a consideration of the losses they have sustained by the late fatal calamity of fire, and as this indulgence might, at first sight, appear to put them on a footing with the pensioned proprietors, who may have a claim upon the Company, the Committee proposed that the line of distinction to be drawn between them shall be this, namely; that the pensioned proprietors shall have the full extent of their former ground allotted them, and the deficiency to fall upon the assessed property.

It is not necessary to trace any more of the proceedings of the town Committee upon the subject of rebuilding the town, it is sufficient to state that, notwithstanding the decided opinion offered by the Advocate General in favour of the right of Government to resume possession of the assessed ground, and the opinion of all of the necessity of such a measure, the effort of the town Committee to carry their plans into effect as well by threats as by persuasions, entirely failed. The Natives ultimately succeeded in their opposi-

\* This is a very contracted view of the question. The Court will be found to have considered the compensation on more just principles

tion, and in the object of rebuilding on their old foundations; all the Committee could do was to limit their houses in respect to height, and taking off from each front a portion of ground for widening the streets, which the Natives readily acceded.

On the question concerning the right of pension proprietors to rebuild on their old foundations and of the assessed proprietors to indemnification for improvements, the Court observed "we must think with the town Committee in opposition to the opinion of our standing counsel, that the agreement of 1672, between Government and the pension proprietors, clearly proves that Government might resume for public purposes any part of the lands held by them on making a proportionate abatement of the pension or rent and paying a valuation for the property standing thereon; with respect to the assessed proprietors, as they have always been considered merely as tenants at will and liable to be removed, whenever the land might be wanted for public purposes, they can have no claim of compensation but for improvements, which in the present instance are destroyed."

On being subsequently informed of the opposition made by the Natives to the various plans and modifications made by the Committee to meet their prejudices, the Hon'ble Court directed that "should the inhabitants still obstinately refuse to accede to such regulations as are essential to the future safety of the garrison and the true interest of the community, and persist in their endeavours to gain possession of the sites of their former habitations, we direct that you take the earliest opportunity of advising us of the same; and that, in the interim, you use your utmost endeavours to delay, or as far as may be practicable to prevent, their rebuilding until you receive our further orders."

By comparing, however, the whole of the correspondence with the Hon'ble Court on the proceedings for rebuilding the town, it is obvious that they had no objection to the Natives occupying their former ground, within the fort, provided they consent to such regulations as in the opinion of Government are essential to the future safety of the garrison, and the true interests of the community. These objects they plainly think are perfectly compatible with permitting a native town within the walls of the fort, though not with allowing its inhabitants to occupy the exact sites of their former habitations, and it is, therefore, only in the event of their insisting on this, and consequently refusing to give up any space for widening

of streets, &c., that they direct "the utmost endeavours to be used to delay, or as far as may be practicable to prevent their rebuilding until the further orders of the Court are received."

In reviewing the result of those proceedings the sound policy which dictated the observance of a moderate line of conduct towards the inhabitants, must be applauded. The assessed ground had been mortgaged in many instances, and it was, therefore, a species of property as valuable in the market as the pension. Had the Government brought the question of the right to resume the ground to a legal issue, and succeeded, they would have gained a barren property, but lost perhaps for ever the unlimited confidence which the Native inhabitants have hitherto reposed on the good faith and liberality of the Company. They would at once have seen that the acts and the long train of encouraging measures under which this island had risen from a state of barrenness to its present height of wealth and prosperity, were founded on disreputable views, on acts ostensibly liberal, but covertly designed to ulterior advantages; but after purchasing Hornby's property, which was in fact paying for the ground exclusively, for the walls and materials were not worth the expence of removal, the Government could not resume the ground of the other assessed holders of land without awarding a compensation, which was estimated at five lacs of Rupees.

I will now adduce two important instances where ground has recently been granted to individuals within the fort. They are important because the individuals to whom the grants were made have expended large sums of money upon the premises, upon the faith no doubt of their possessing a permanent right in the soil.

Mr. Henshaw on the 30th April 1798, "solicited the grant of a spot of ground within the town on lease for the term and duration of the Hon'ble Company's agreement with Mr. Sabatier whereon to erect an improved Hydraulic machine for compressing and retaining cotton wool." Instead of granting Mr. Henshaw a lease on the terms solicited for fourteen years, which I understand to have been the duration of the agreement with Sabatier; the Government directed the Collector "to adjust with Mr. Henshaw, the terms of possession on the usual payment of quit-rent, granting him thereon the customary lease." The Collector accordingly granted the customary lease indefinite as to the period; putting Mr. Henshaw in possession of 2078-3 square yards of ground on condition of his paying annually to the Company Rupees 57 0 58 reas, being the usual rate of quit and ground rent, calculated at eleven reas the square yard.

The original speculation on which the grant was solicited having failed, Mr. Henshaw applied in May 1804 for permission to convert the buildings into warehouses. The town Committee declined, giving an opinion upon his application, but the Government agreed "to his retaining the ground granted to him for erecting his cotton presses and to his converting the cotton premises into warehouses." Mr. Henshaw accordingly converted those spacious buildings situated in the most central and advantageous part of the town, as to trade, into valuable warehouses, the construction of which has cost him from first to last nearly two lacs of Rupees.

The other instance will show that another spot of ground within the fort of equal value, and which the Government might at one time have sold for at least fifty thousand Rupees, has been made over to Hormasjee Bomanjee on similar terms. It was at first determined to sell the ground to Hormasjee at the rate of twelve Rupees a square yard on his paying annually a quit-rent to the Company, provided it was usual to reserve such quit-rent on purchased ground within the garrison; but there being room to doubt the expediency of the Company's selling any ground belonging to them within the garrison, of which it was supposed scarcely any precedent could be found, the town Committee was ordered to enquire into the practice that had hitherto obtained in that respect, and if it should be found in favour of leasing rather than selling, they were to settle with Hormasjee on that footing accordingly.

Leasing appearing to have been the practice he was, therefore, put in possession on the usual "mode observed in putting any person in possession of ground belonging to the Hon'ble Company within the fort," viz. "by a grant or lease from the Collector without any definitive period being specified. The party or parties being thereby rendered responsible for the payment of the established ground rent of eleven reas the square yard annually." For this valuable ground situated behind the theatre, Hormasjee therefore pays an annual rent of Rupees 64 0 39. He has built a spacious family residence on it, at an expence of Rupces one lac and a half probably.

Besides these, the statement No. 7 will show other instances where applications for ground have been complied with on similar terms. That these grants or rather the titles to the ground have been respected by the Government, the proceedings of the town Committee afford sufficient evidence, nor can I trace an instance where these titles have been successfully, or ever attempted even to be, resisted. There are, however, many instances where the Government have



stamped the validity of these grants, by purchasing what is termed assessed property without bringing forward any claim of right to the ground, for the value of which the proprietor had the sole and exclusive advantage.

It is an extraordinary fact that the principal part, if not the whole, of the landed property which the Company now possess within the walls, they have acquired by purchase; and that within the memory of many of the inhabitants now living. Having purchased all the ground they now possess within the fort of those who were considered to be tenants at will, it is rather too late to attempt to establish a right to resume the property of that description, at their will and pleasure.

A part of the extensive range of buildings appropriated for the accommodation of the Secretary's Office was in 1764 purchased by Mr. Whitehill for the sum of Rupees forty-five thousand. It appears by the Collectors books to have measured 2133½ square yards, and paid thirty-two Rupees to the Company at the rate of six reas per square yard. It is within the recollection of some of the inhabitants now living that the site of the Secretary's Office was previously to the year 1764, a tank, which was filled up by Mr. Whitehill and the house in question erected thereon.

Mr. John Hunter in the same year tendered his house with all the warehouses, outhouses, stabling and two large compounds, being the premises formerly designated the "second's house," and now appropriated to the meeting of Council, and for the Sudder Adawlut, for the sum of Rupees sixty thousand; which was purchased upon the report of a Committee, showing that the Company would by the two preceding purchases, save seventeen thousand sixty-six Rupees per annum; the one was rented by Government for the Secretary's Office, and the other possessed advantages more than adequate to the warehouses rented by the Company. It measured 2766½ square yards, and paid Rupees 41 2 0 rent to the Company at the rate of six reas per square yard.

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I have but few words to offer on the third head of enquiry; to ascertain the light in which the grantees have been ascertained to view their allotment of lands.

It will be admitted I think that the conduct and measures of Government have throughout been calculated to generate an impression in the inhabitants that the right to the soil was intended to be per-

manently vested in the land-holder, and I ground that opinion upon the evidence contained in the preceding division of this report.

Upon an abstract view of the case, and limiting our consideration of its merits to Aungmye's convention and the proceedings of the Government since the year 1731, the opinion of Mr. Thrieland and of the Hon'ble Court that the Government had a right to resume lands which had become waste from the destruction of the buildings or other improvements, by fire or otherwise, seem founded upon a just basis. But the successful opposition made by the Natives in 1803 upon that particular point, the purchase of Hornby's premises, the exchanges made with Hormasjee Bomanjee and with Mr. Stewart, the difficulty of forming a principle of compensation for improvements, and a comprehensive consideration of the policy uniformly observed by the Government in inviting strangers to settle on the island, would, I should think, operate decidedly against the Company in any legal investigation of the question. Any attempt to shake the confidence of the Natives in the validity of their landed tenures should be avoided; but where ground may be required bonafide for public purposes, as was the case with Hornby's premises in 1803, it is to be regretted that the right of resuming such lands, where the houses had been destroyed, had not been brought to legal issue, when the principle of compensation would at least have been established; for I consider a tenant entitled to more than the mere value of the buildings, but the Government having, in every instance, shrunk from investigation, and purchased assessed ground on which the ostensible improvements had been destroyed, and otherwise for its just value, what must the impression of the Natives be? unquestionably, that their rights are indisputable.

If the Government should be desirous of trying the right of resuming ground occupied apparently without any authority, which yields an immense profit to the possessor, as I shall hereafter show, and upon which only sheds of a trifling value have been built, and for which alone the Company ought to pay, according to the prevailing legal opinions upon the subject, they have only to urge their law officers to prosecute the measures already prescribed, with the view of resuming the ground which has been represented to be a nuisance to the town barracks. • ∴ •

This is a case, however, very different from those which have been quoted in the course of this report. The parties occupy the ground without the colour of authority; and may be considered in the light of those persons who daily erect their stalls over every part of the island; the improvements are of little value, though the profit de-

rived from the rent of the ground is immense. It appears to me that the Company ought to succeed in ejecting the proprietors of this ground, but whether it will operate as a precedent to affect the other tenures within the walls of the fort, said to be held at the will of the Government, which could not have been improved and built upon without some permission, by the substitution of leases more favourable to the Company, is a question upon the legality of which the Advocate General can best pronounce. Upon the equity and policy of the measure, however, there can be but one opinion.

As a precedent in support of such a measure, considerable reliance has been placed on the issue of the case reported in Mr. Thriep-land's letter of the 11th of July 1806, Shaik Abdul Amoly against Nasserwanjee Cawasjee, who was only nominally the defendant, the Company having been the most interested in the question. I see, however, but little in that transaction which could uphold the Company in any attempt to eject a proprietor of ground within the walls of the fort. The ground in dispute was a batty field. The holder of the ground had expended no money upon it, for which he had not been annually recompensed from the produce. Had Shaik Abdul, as Mr. Henshaw and Hormasjee Bomanjee have done, constructed a costly house on the ground, I feel persuaded that the Court of Recorder would have given judgment in his favour. Even in that case, however, Sir James McIntosh delivered an opinion to the justness of which one cannot refuse unqualified assent. He observed that, "though the eventual right of resumption might be known to many or most of the inhabitants, the Company certainly suffered an expectation to be created and very generally entertained, that the right in question was one, the exercise of which was so exceedingly rare on their part, as not to require being very much, or at all taken into account in the transmission of property from one individual to another, hence the large sums so frequently paid on such occasions, hence the loans advanced on the security of such lands, and the imposing credit which they enable their possessor to obtain: while such things are familiarly known and daily brought under the eyes of Government, the unwary occupants may not have regular conveyances enabling them to maintain possession in a Court of law, but they have to allege a tacit acquiescence, a *primitive right*, which in the eye of conscience and morality gives them almost an equal claim to subsequent forbearance, and must, in every case of resumption where an adequate price has been bona fide paid, make the act appear, and be felt, as a grievous hardship, if not an open and downright injury."

Mr. Thriepland could not deny "that there was but too much truth in these observations of the Court." The arguments which Sir James McIntosh has advanced founded upon the custom of the manor are unanswerable; it would not only be felt as a grievous hardship, if not an open and downright injury, but would I am persuaded discourage other capitalists from settling on the island, and probably compel not a few to withdraw themselves, who have resorted hither with the view of becoming permanent residents. It would in short tend to sap the foundation of that policy by which the island of Bombay has risen from a barren rock to its present state of prosperity and celebrity as a maritime port.

I have failed, therefore, to trace an instance where those who are viewed tenants at will have been ejected, within the walls of the fort; but the instances where possession has been held in defiance of the Government are numerous, and sufficient to prove, that its intention, in granting those indefinite leases to have been to confer a right in perpetuity.

But whatever may have been the views of the Government, from the mode in which the Proprietors of ground have sold and transferred their property even to the Government itself, they have considered themselves to possess a right in perpetuity. The Register of sales and transfers of property is not carried beyond the year 1801. But the establishment of the court of the Recorder, and the operation of Sec. XVI. Reg: III. 1799 restricting the Revenue Judge "from receiving or entertaining any suit, under any pretence whatever relating to any house, land tenements, or hereditaments, nor a dispute regarding the boundary of lands, houses, tenements, or hereditaments, situated within the Town and island of Bombay;" without the enactment of any regulation whatever for defining and preserving the rights of the Company, leaving them to be maintained by the rule of custom, have virtually forfeited the titles by which estates within the Town have been held. The Proprietors have been at full liberty to obtain deeds drawn out by professional men, and registration in the King's Court, which, in the entire absence and neglect of every provision for those purposes on the part of the Government, which would appear to have abandoned from the year 1799, every controul, if ever they can be said to have been vigilant in the exercise of it, over those transactions, must have stamped their validity.

But allowing that every lease has been granted conformably to the order of Council of the 18th of May 1733, still as it was renewable by the grantee, on the payment of one year's rent, the property would still have partaken of the character of a permanent tenure;

and all that the Company have lost, therefore, is the periodical receipt of a fine equal to one year's rent on a renewal of the lease.

I will, however, concede the argument, and admit that, though the Government have pursued a lax system, in leasing out the public property it is no justification for the blind and imprudent manner in which individuals have invested their capitals on such undefined leases, and that the whole of the estates are by the letter of the law forfeitable to the company without any compensation? Will any one advise the company even to agitate the question of right with the view to its formal recognition? What may be considered as a fair and unexceptionable transaction between individuals in England, or even between the Government and an individual in England, where leases of Lands are well understood, would operate as an oppression in India and between the East India Company and the land holders of Bombay, would be felt "as a grievous hardship, if not an open and down right injury;" very few of the natives have any idea of the various tenures by which lands are leased in England; but few of them know what is necessary to be done to protect them against the operation of the statute of frauds.

The native Governments of the country are fully sensible of the advantage of giving the cultivator some property in his possessions; and accordingly we find the right of possession considered as strong as though confirmed by the most formal grants or sunnuds; indeed the country people seem to conceive the possession of a sunnud, either to imply that a doubt has existed, or at least that the property is recently acquired, and, therefore, even possessors of such instruments are unwilling to shew them. They conceive that they possess a "primitive right", superior to any derived from the most formal grant. These are natural impressions, and they have been long cherished in Bombay. Such in fact seems also to have been the policy of the Government, in establishing settlers on the Island; they have allowed a confidence to be created in the minds of the Natives of the permanency of their lands. They were told that if you want ground to build on, apply to the clerk of the works, and he will measure out what you want; this grant they have been accustomed to consider as conferring a right in perpetuity. They have seen ground thus granted repurchased by the Government; they have successfully resisted its resumption, and the Government have refrained to assert their right, when they had the fairest opportunity to do so.—

"The inhabitants of Madras and of all the other English, Dutch, French, and Danish Colonies in India were ( we are informed ) bound to furnish Military service upon emergencies;" hence it appears that

the lands all over India were held by a feudal tenure. By an advertisement published in the Madras Gazette, I find that the lands within the limits of that Presidency are leased for a number of years, renewable on the payment of an established fine; the grants of ground providing that "at the end and expiration of every thirty years of the term leased, there shall be paid for the use of the Hon'ble Company, the full and just sum of thirty Pagodas current money of Fort Saint George; and at the end of the term of ninety nine years the full and just sum of one hundred Pagodas current money of Fort St. George." I have no doubt that the lands are leased on the most moderate rents. The object of the Resolution of 1733 was to establish a similar system in Bombay. At Madras then the lands appear granted on leases renewable on the payment of a very trifling fine. Bombay is held of the crown by a similar tenure; and by the same tenure as far as respects their permanency have the crown lands been leased to individuals, or in other words the custom of the Manor has converted them into private property, or copy hold tenures.

That the mode in which the Government has leased the crown lands has not been regulated by the principles of English Law I admit. In fact they have been guided by no established system, but have granted lands to individuals so indiscriminately, that it is difficult to form an opinion upon an abstract consideration of the instruments by which they are held.

In the opinion of an English lawyer probably both Mr. Henshaw and Bomanjee may be considered merely as *tenants for life*. There are no words of inheritance in those instruments, the lands being let out to the latter on conditions of his paying annually to the Hon'ble Company or to the Collector for the time being the usual rate of quit and ground rent calculated at eleven reas the square yard. Upon his death, therefore, the property, according to the tenor of the bond, devolves to the Company.

But equity would probably quiet him in possession, in the event of Government being disposed to oust him. Equity would found its decision upon the custom of the Manor. By similar instruments the crown lands have been leased to individuals, yet their heirs have succeeded to the property without any objection on the part of the lord, and their administrators have disposed of those lands in many instances by the consent of the lord, and in others at their will and pleasure.

Upon these grounds then I contend that, by the custom of the manor, the crown lands leased since 1674, have become the property of individuals. The ancient constitution of the island was feudal. I

refer to the history of the feudal system and of the ancient and modern English tenures as contained in the 4, 5, & 6 chapters in the 2d volume of the Commentaries, \* as affording a most applicable and correct view of the ancient constitution of this Island, and of the effects which have followed from the custom in which the crown lands have been allotted to individuals, as constituting the basis upon which my opinion is founded.

In Bombay as in England "at the first introduction of the feuds as they were gratuitous, so also they were precarious, and held at the will of the lord, who was then the sole Judge whether the vassal performed his services faithfully. Then they became certain for one or more years, but when the general migration was pretty well over, and a peaceable possession of the new acquired settlement had introduced new customs and manners; when the fertility of the soil had encouraged the study of husbandry, and an affection for the spots they had cultivated began naturally to arise in the settlers, a more permanent degree of property was introduced, and feuds began now to be granted for the life of the feudatory. But still feuds were not yet hereditary, though frequently granted by the favour of the lord, to the children of the former possessor; till in process of time it became unusual, and was therefore thought hard, to reject the heir, if he were capable to perform the services. &c. &c. In process of time feuds came by degrees to be universally extended beyond the life of the first vassal to his sons &c. &c; but when a feud was given to a man and his heirs *in general terms*, then a more *extended* rule of succession took place, and when the feudatory died, his male descendants in *infinitum* were admitted to the succession &c. &c."

Again, "Villeins, by these and many other means, in process of time, gained considerable ground on their lords; and in particular strengthened the tenures of their estates to that degree that they came to have in them an interest in many places full as good, in others better than their lords. For the good nature and benevolence of many lords of manors having time out of mind permitted their villeins and their children to enjoy their possessions without interruption, in a regular course of descent, the common law of which custom is the life, now gave them title to prescribe against their lords; and on performance of the same services, to hold their lands, in spite of any determination of the lord's will, for though in general they are still said to hold their estates at the will of the lord, yet it is such a will as is agreeable to the custom of the manor; which customs are preserved and evidenced by the rolls of the several Courts baron

\* Blackstone.

in which they are entered, or kept on foot, by the constant immemorial usage of the several manors in which the lands lie, and as such tenants had nothing to show for their estates but these customs, and admission in pursuance of them, entered on those rolls, or the copies of such entries witnessed by the steward, they now began to be called tenants by copy of Court\* roll, and their tenure itself a copy hold."

Again "in some manors, where the custom has been to permit the heir to succeed the ancestor in his tenure, the estates are stiled copy holds of inheritance; in others, where the lords have been more vigilant to maintain the rights, they remain copy holds for life only; for the custom of the manor has in both cases so far superseded the will of the lord that provided the services be performed or stipulated for, by fealty, he cannot, in the first instance, refuse to admit the heir of his tenant upon his death; nor in the second, can he remove his present tenant so long as he lives, though he holds nominally by the precarious tenure of his lord's will." I will not weaken the force of this quotation by any further observation on this division of the report.

I now proceed to trace the system of taxation from the cession up to this period, with the view to ascertain whether the Company possessed or have exercised the right to increase the land tax over every description of land holder.

It has already been stated that the inhabitants of Bombay whilst subject to the king of Portugal, paid one fourth part of the profits of their lands as a quit-rent, which President Aungier in 1674, commuted for a quit-rent of twenty thousand Xeraphins, reserving to the Company the right to the military services under which lands were held of the Crown of Portugal.

On the 24th June 1718 the Government laid a certain tax or ground rent on all the inhabitants residing within the town walls in order "to reimburse the right Hon<sup>ble</sup> Company some part of the great expence and charge they have been at in fortifying and securing the said town;" this tax may be considered as a commutation of the military services reserved under Aungier's convention, and to have changed the ancient constitution of the island in respect to all lands in a productive state, or yielding rent.













